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*Teaching Guides
IDENTIFIERS ESEA Title III

ABSTRACT

Presented in these 13 teacher's guides for grades K-12 are lesson plans and ideas for integrating language arts and environmental education. Each lesson originates with a fundamental concept pertaining to the environment and states, in addition, its discipline area, subject area, and problem orientation. Following this, behavioral objectives and suggested learning experiences are outlines. Behavioral objectives include cognitive and affective objectives and skills to be learned, while learning experiences list student-centered in class activities and outside resource and community activities. Space is provided for teachers to note resource and reference materials--publications, audio-visual aids, and community resources. The guides are supplementary in nature and the lessons or episodes are designed to be placed in existing course content at appropriate times. This work was prepared under an ESEA Title III contract. (BL)

Project I - C - E

INSTRUCTION - CURRICULUM - ENVIRONMENT

ED055919

A SUPPLEMENTARY PROGRAM FOR ENVIRONMENTAL EDUCATION

DISCIPLINE AREA Language Arts Grade K

Produced under Title III E.S.E.A.
PROJECT I-C-E
Serving Schools in CESA's 3-8-9
1927 Main Street
Green Bay, Wisconsin 54301
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INSTRUCTION - CURRICULUM - ENVIRONMENT

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PROGRAM FOR ENVIRONMENTAL EDUCATION

Language Arts _____ Grade K

III E.S.E.A.

ESA's 3-8-9

54301

Robert Warpinski, Director
Robert Kellner, Asst. Director
George Howlett, EE Specialist

PREFACE

If you wish to excite students about their environment, help of over a hundred teachers, year long meetings, a summer workshop ecologists, this guide means realistic, developed aid for you. which have directed teachers in writing and editing this guide.

1. This guide is supplementary in nature and the episodes are designed--to plug into existing, logical course content.
 2. Each page or episode offers suggestions. Since you know you to adapt, adopt, or use. Be design, the range of suggestions mentation and usage are even wider. Many episodes are self-c others can be changed in part or developed more keenly over possibilities allow you to explore.
 3. Now we urge that you try the episodes and suggested learning plan. The reasons are simple. No guide has all the answers unless viewed in the context of your classroom situation. They give it a triple reading, check over the resources listed, motivate your students, and seek help. The Project personnel and knowledge page stand ready to aid your efforts. Feel free
 4. The Project Resource Materials Center serves all CESA 3, 8, and private. We will send available materials pre-paid. Call for visit. Phone 432-4338.
 5. Check often the Project ICE Bibliography in your school library Center materials. Please offer suggestions, comments, or advice service may grow. Let's help each other.
 6. Involve yourself with the guide by reacting to it with scratch suggestions on the episode pages or use the attached evaluation lected in late May next year and will be used in our revisions reactions and suggestions--negative and positive. Please note in the episodes may refer to specific, local community resource cases, individual school districts and teachers will have to substitutes. A list of terms pertinent to the episodes is below.
 7. Ecologists and other experts have simplified the issue--survival Creation's beauty and complexity--often noted as the work of a and human energy to save. A year's work by a hundred of your gesture. Without you, their work will crumble, and so might we let us live to think, feel, and act in harmony with our world.
1. Cognitive means a measurable mental skill, ability, or process
 2. Affective refers to student attitudes, values, and feelings
 3. APWI means Acceptable Performance Will Include (labels a course)
 4. EPA - Environmental Problem Area.

PREFACE

to excite students about their environment, help is ready. Thanks to the efforts of teachers, year long meetings, a summer workshop, university consultants and this guide means realistic, developed aid for you. Please note the following ideas selected by teachers in writing and editing this guide.

This guide is supplementary in nature and the episodes are designed--at appropriate instances--into existing, logical course content.

Each episode offers suggestions. Since you know your students best, you decide what to adopt, or use. By design, the range of suggestions is wide; your chances for experimentation and usage are even wider. Many episodes are self-contained, others open-ended, still others can be changed in part or developed more keenly over a few weeks. These built-in episodes allow you to explore.

That you try the episodes and suggested learning experiences but please pre-plan the reasons are simple. No guide has all the answers and no curriculum will work in the context of your classroom situation. Thus, before trying an episode, do a careful reading, check over the resources listed, make mental and actual notes, discuss with students, and seek help. The Project personnel and teachers listed on the acknowledgment page stand ready to aid your efforts. Feel free to ask their help in pre-planning.

The Resource Materials Center serves all CESA 3, 8, and 9 area schools--public and private--and will send available materials pre-paid. Call for any help, materials, or to the Project ICE Bibliography in your school library for available Resource Materials. Please offer suggestions, comments, or advice--at any time--so that this guide can grow. Let's help each other.

Work with the guide by reacting to it with scratch ideas, notes, and extended comments on the episode pages or use the attached evaluation format, which will be collected May next year and will be used in our revisions. We sincerely want your suggestions--negative and positive. Please note that some resources listed in the guide may refer to specific, local community resources or conditions. In such cases, individual school districts and teachers will have to adopt local or available substitutes. A list of terms pertinent to the episodes is below.

Other experts have simplified the issue--survival--yours, mine, our students, the beauty and complexity--often noted as the work of a genius--will take our genius and energy to save. A year's work by a hundred of your fellow teachers is a saving without you, their work will crumble, and so might we all--literally. Instead, let's try to think, feel, and act in harmony with our world.

Editorial Board

Means--a measurable mental skill, ability, or process based on factual data.
Refers to student attitudes, values, and feelings.
Acceptable Performance Will Include (labels a cognitive or mental performance.)
Personal Problem Area.

ACKNOWLEDGEMENTS: The following teachers and consultants participated of the Supplementary Environmental Education Guide

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 Lee Hallberg, Appleton
 Ronald Hammond, Hortonville
 Jerome Hennes, Little Chute
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 Darrell Johnson, Hortonville
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 John Little, Winneconne
 Gene Ploetz, Kaukauna
 Gordon Rohloff, Oshkosh
 William Schaff, St. Joseph
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 Carolyn Shills, New London
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 Clarence Trentlage, Freedom
 Mike Hawkins, Xavier
 Beth Hawkins, Xavier
 Ed Patschke, Menasha
 Connie Peterson, St. Martin(L)
 Dallas Werner, Kaukauna
 Ron Schreier, Omro

Joa
 Ang
 Har
 Ant
 Lil
 Carn
 Joan
 Bill
 Rev
 Robe
 Russ
 Paul
 Roy
 Siste
 Jim
 Dori
 Joyce
 Rich
 Glor
 Geor
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 Thom
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 Dennis Bryan, UWGB

Discipline Area

Subject

Problem Orientation

BEHAVIORAL OBJECTIVES

Cognitive: Through pantomime, the child will recognize the sun as the energy source.

Affective: Child accepts why life depends upon the correct amount of sunshine for strength & growth.

Skills to be Learned

Oral expression through
dramatic play

Discussion about film,
if used.

SUGGESTED LEARNING

- I. Student-Centered in class activity
 1. Two children representing plants in dramatic play & pantomime show the differences in growth & strength of the 2 plants in experiment. Third child represents the sunshine.
 2. Discussion with riddles. (Ex.- What is big, yellow, & round & doesn't make a sound. It's far, far away, but we still see it during the day.
 3. Read story about the sun.
 4. Show picture that includes the sun. Have children describe what they see. Could make up a story about it.
 5. Bulletin board display. Sun in center; children place picture objects around that depend on the sun. (Label them also, if desired.)

sun, the basic source

converted through

is into a form all

use for life pro-
cesses.

Discipline Area

Subject

Problem Orientation

Language Arts

Language Arts

Grade Kind.

CTIVES

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. Two children representing plants in dramatic play & pantomime show the differences in growth & strength of the 2 plants in experiment. Third child represents the sunshine.
2. Discussion with riddles.
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4. Show picture that includes the sun. Have children describe what they see. Could make up a story about it.
5. Bulletin board display.
Sun in center; children place picture objects around that depend on the sun. (Label them also, if desired.)

II. Outside Resource and Community Activities

Resource and Reference Materials
Publications:

Books:

The Sun, Our Nearest Star, by
Franklyn M. Branley, Crowell
Co., 1961

Audio-Visual:

Community:

Continued and Additional Suggested Learning

Materials	Continued and Additional Suggested Learning Experiences
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<p>Materials</p>	<p>Continued and Additional Suggested Learning Experiences</p>
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C 2. All living organisms interact among
O themselves and their environment,
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C forming an intricate unit called an
E
P ecosystem.
T

Discipline Area Lan
Subject Lan
Problem Orientation

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING ACTIVITIES
<p><u>Cognitive:</u> Children arrange each system in order. <u>Affective:</u> Children will accept that all organisms cannot live alone.</p>	<p>I. Student-Centered in class activity A. Find pictures & make ecological interdependence pictures.</p>
<p><u>Skills to be Learned</u> Language development as evidenced in discussion of animal life of locale Math game (Fishing for number facts)</p>	<p>Bunny Fox Grass</p> <p>B. Paste on large drawing: Food Chains Deer Grass Hunter</p> <p>C. Seaweed Little Fish Big Fish</p> <p>D. Their own family chain-intypical foods they eat. Man Cow (meat & Grass</p>

living organisms interact among

s and their environment,

n intricate unit called an

Discipline Area Language Arts

Subject Language Arts

Problem Orientation Ecosystem Grade K

DRAL OBJECTIVES

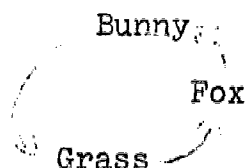
Children arrange
in order.
Children will
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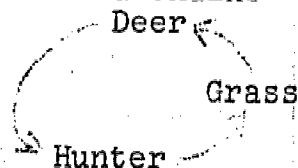
SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

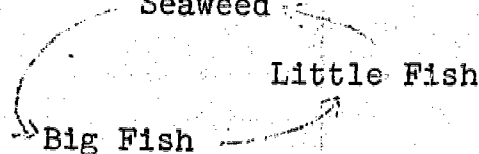
A. Find pictures & make
ecological interdependence
pictures.



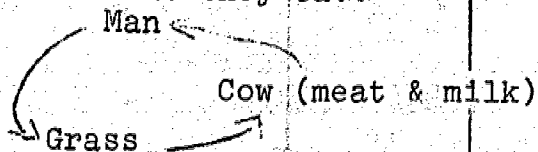
B. Paste on large drawing:
Food Chains



C. Seaweed
Little Fish



D. Their own family chain-into
typical foods they eat.



Resource and Reference Materials
Publications:

Audio-Visual:

Science Material
Original drawings of students
Games
Smokey songs

Community:

Conservation person

Continued and Additional Suggested L

Materials	Continued and Additional Suggested Learning Experiences
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ts

C 3. Environmental factors are limiting
 O
 N on the numbers of organisms living
 C
 E within their influence, thus, each
 P
 T environment has a carrying capacity.

Discipline Area _____

Subject _____

Problem Orientation _____

BEHAVIORAL OBJECTIVES

Cognitive: Children will show through oral discussion ability to make simple & logical judgments.
Affective: Children will know that size of area limits fun & activities.

Skills to be Learned

Oral skills
 Observation
 Making judgments
 Giving reasons for conditions & feelings

SUGGESTED LEARNING

- I. Student-Centered in class activity
 1. Blocks in a container.
 One child can demonstrate that placing blocks in a box is limited. Keep putting in blocks until container will hold no more. Discussion & making oral judgments as to it only holding a certain number.
 2. Mark off a small area & and crowd with children till filled. Then, taking the number of children in the small area, take them outdoors and let on playground area while others observe.
 3. Return to room. Follow up with questions:
 How did you feel?
 What could you do & not do in each space?

tal factors are limiting

s of organisms living

influence, thus, each

as a carrying capacity.

Discipline Area

Subject

Problem Orientation

Language Arts

Language Arts

Population

Density

Grade

K

OBJECTIVES

Children will
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Children will
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activities.

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SUGGESTED LEARNING EXPERIENCES

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the small area, take them
outdoors and let on play-
ground area while others
observe.
 3. Return to room. Follow
up with questions:
How did you feel?
What could you do & not
do in each space?

- II. Outside Resource and
Community Activities

Resource and Reference Materials
Publications:

Rabbit Hill by Robert Lawson

Audio-Visual:

Film:

Rabbit Hill, color, 2 reels
53 minutes, Brown County
Library.

Community:

Continued and Additional Suggested

C
O
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C
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P
T

4. An adequate supply of _____ are _____
 water is essential for life. _____

Discipline A

Subject

Problem Ori

BEHAVIORAL OBJECTIVES	SUGGESTED
<p><u>Cognitive:</u> The learner will tell a story about going without water. The learner will list ways he uses water at school.</p> <p><u>Affective:</u> The class will offer ways in which they use water. The list will be written on board.</p>	<p>I. Student-Centered in activity</p> <ol style="list-style-type: none"> 1. Show pictures of the places in the world where water is found (ocean, pond, river) 2. Show pictures of where there isn't water (deserts, tundras) 3. Make bulletin board above pictures. 4. To see if water is essential, the children will not use any water for a given amount of time. 5. Children will list things they were not able to do because of not being able to use water. 6. Children will tell about <ol style="list-style-type: none"> a. how they felt when they couldn't use water b. why they need water 7. The children could figure out a lunch menu for a meal which would not require the use of water.
<p><u>Skills to be Learned</u></p> <p>Listing what could not be done if there was no water</p> <p>Giving a talk about the need of water</p> <p>Story-telling</p>	

ate supply of pure

essential for life.

Discipline Area

Language Arts

Subject

Language Arts

Adequate

Problem Orientation

Water Supply

Grade

K-1

AL OBJECTIVES

The learner
story about
water. The
list ways
at school.
The class will
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board.

Learned
could not
ere was no

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water
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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

1. Show pictures of the many
places in the world where
water is found (ocean, lake,
pond, river)
2. Show pictures of where
there isn't water (deserts,
tundras)
3. Make bulletin board of
above pictures.
4. To see if water is es-
sential, the children
will not use any water for
a given amount of time.
5. Children will list all
things they were not able
to do because of not being
able to use water.
6. Children will tell story
about
 - a. how they felt when they
couldn't use water
 - b. why he needs water
7. The children could try to
figure out a lunch menu or
meal which would not use
water.

II. Outside Resource and
Community Activities

Resource and Reference Materials
Publications:

Continued and Additional Suggested Learning

Audio-Visual:
pictures of where
water is found & where
water is not found

Community:

Materials

Continued and Additional Suggested Learning Experiences

C 5. An adequate supply of clean air is

O

N essential because most organisms

C

E depend on oxygen, through respiration,

P

T to release the energy in their food.

Discipline Area La

Subject La

Problem Orientatio

BEHAVIORAL OBJECTIVES

Cognitive: There is other places where there is a lack of air, such as plastic bags, trunks, sand banks. Children will identify these places.

Affective: The child will respond to the teacher's question: If you saw a refrigerator outside what would you do?

Skills to be Learned

Descriptive words
Good speaking skills
Building a plot
Good listening &
assimilation skills

SUGGESTED LEAF

I. Student-Centered in class activity

A. Class activity

1. Teacher draws (cross-section) of child in c
air-tight appliance. A
inside designated by c
lating arrows-to child.
supply is exhausted in
limited place, one can
survive; so all air sup
has its limits in vario
amounts in various area
must be conserved or w
used.

Problem focused: Lack o
oxygen causes sickness
adverse effects.

the supply of clean air is

because most organisms

Discipline Area Language Arts

oxygen, through respiration, Subject

Language Arts

the energy in their food.

Problem Orientation Sufficient AirGrade K

OBJECTIVES

There is other
There is a
such as
trunks,
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these

child will
teacher's
you saw a
outside what

learned
words
skills
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SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
- A. Class activity
1. Teacher draws (cross-section) of child in close air-tight appliance. Air inside designated by circulating arrows-to child. As supply is exhausted in a limited place, one cannot survive; so all air supply has its limits in various amounts in various areas & must be conserved or wisely used.
- Problem focused: Lack of oxygen causes sickness or adverse effects.

- II. Outside Resource and Community Activities
- A. Outside activity
1. Safety pamphlet from police department or a newspaper article relating death or danger of playing with or in a discarded refrigerator, freezer, etc.

Resource and Reference Materials
Publications:

Continued and Additional Suggested L.

Audio-Visual:

Community:

Materials

Continued and Additional Suggested Learning Experiences

C 6. Natural resources are not equally

O

N distributed over the earth or over

C

E time and greatly affect the geographic Subject

P

T conditions and quality of life.

Discipline Area

Problem Orientation

BEHAVIORAL OBJECTIVES

Cognitive: Children will identify plants & animals of an arid & tropic area & classify through oral discussion & observation.
Affective: Each child will select whether he would like to live in the jungle or where he now lives & tell why.

Skills to be Learned

Observation
 Oral discussion
 Making judgments
 Vocabulary
 Classification

SUGGESTED LEARNING

- I. Student-Centered in class activity
 1. Show to class color photos of desert plant & animal life in environment.
 2. Color photos of jungle or tropical environment.
 3. Through observation & discussion, children point out & compare two environments.
 4. Develop terms: desert, jungle
 5. Point out heat, lack of water & moisture.
 - a. If desired, as part of another lesson, teacher may also point out seasons.
 6. Flannelgraph presentation
 - a. 6 people vs. 4 plates
 - b. dogs vs. no. of bones

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earth or over

Discipline Area

Language Arts

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Animal Life

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Problem Orientation Resource Usage Grade K

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SUGGESTED LEARNING EXPERIENCES

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- I. Student-Centered in class activity
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 2. Color photos of jungle or tropical environment.
 3. Through observation & discussion, children point out & compare two environments.
 4. Develop terms: desert, jungle
 5. Point out heat, lack of water & moisture.
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 6. Flannelgraph presentation
 - a. 6 people vs. 4 plates
 - b. dogs vs. no. of bones

- II. Outside Resource and Community Activities

Resource and Reference Materials
Publications:

Continued and Additional Suggeste

Audio-Visual:

Living Desert, color photos
Walt Disney Productions
Kim, Jungle Boy, color
paintings

Community:

classroom or school garden

Materials	Continued and Additional Suggested Learning Experiences
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C 7. Factors such as facilitating transportation,
 O economic conditions, population growth, Discipline Ar
 N and increased leisure time have a great Subject
 C influence on changes in land use and Problem Orient
 E centers of population density.
 P
 T

BEHAVIORAL OBJECTIVES

Cognitive: Children will show through discussion, murals or pictures, that they know changes in living are made through economic conditions & increased leisure time.

Affective: The children will make a verbal choice between 2 choices.

Example: Would you have more clothes if you lived long ago or now? Did your mother have to know how to do more things with material long ago or now?

Skills to be Learned

Listening skills

Visual & oral skills

SUGGESTED

I. Student-Centered in cl activity

A. Class: Varied & Invol Students

1. The first part is listening to two re. Story relates how or person with a needle a service for a small community for service she required from ot As opposed to: Pioneer life where each family had to do each service himself to maintain family unit's needs.

2. Discussion question following record on economic changes.

a. In pioneer family many people had to in order for the girl & boy to get clothes?

Example: Dad & bro raised the sheep & sheared them, raised food to feed sheep Grandmother & mother washed & combed the wool. Grandmother to make threads. (

as facilitating transportation,

ions, population growth, Discipline Area Language Arts

leisure time have a great Subject Language Arts

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OBJECTIVES

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

A. Class: Varied & Involving
Students

1. The first part is
listening to two records.
Story relates how one
person with a needle did
a service for a small
community for services
she required from others.
As opposed to: Pioneer
life where each family
had to do each service
himself to maintain the
family unit's needs.

2. Discussion questions
following record on
economic changes.

a. In pioneer family, how
many people had to work
in order for the little
girl & boy to get new
clothes?

Example: Dad & brother
raised the sheep &
sheared them, raised
food to feed sheep.
Grandmother & mother
washed & combed the
wool. Grandmother had
to make threads. (cont.)

II. Outside Resource and
Community Activities

Resource and Reference Materials

Publications:

Hardbound text going with SRA kit which should be used with opaque projector in conjunction with the record.

Audio-Visual:

SRA Grade I Social Studies Kits
Part I Records #12 & #13 (Dealing with economics in a family in the past as compared to today's living)

Part II Records #15 & #16 (Dealing with leisure time being used for pleasure away from home or different activities at home, according to individual choice.

Community:

Library for photo plates showing changes in environment due to machinery, various resources, etc.

Continued and Additional Suggested I

I. (cont.)

- Mother wove, dyed & sewed mat dress & trousers.
- When you who live in this year do you get it?
 - Who finds it easier to get a one dress?
 - In the little town of the sea Tom get his trousers fixed?
 - Why was Mrs. Brown's needle?
 - As more people live in a small can they get new clothes like by raising sheep & making the
 - Would you like this? Why? Like people live closer together.
- Make mural, depicting scenes b e.g. Pioneer vs today
 - Make up a skit depicting 2 way

Materials	Continued and Additional Suggested Learning Experiences
<p>SRA kit n opaque with</p> <p>s Kits (Dealing ly in today's</p> <p>(Dealing used for or home, choice.</p>	<p>I. (cont.)</p> <p>Mother wove, dyed & sewed material to make a dress & trousers.</p> <p>b. When you who live in this year want a dress, how do you get it?</p> <p>c. Who finds it easier to get dresses or more than one dress?</p> <p>d. In the little town of the second story, how did Tom get his trousers fixed?</p> <p>e. Why was Mrs. Brown's needle so important to her?</p> <p>f. As more people live in a small area like a town, can they get new clothes like the pioneer family by raising sheep & making their own material?</p> <p>g. Would you like this? Why? Life changes as more people live closer together.</p> <p>3. Make mural, depicting scenes based on records. e.g. Pioneer vs today</p> <p>4. Make up a skit depicting 2 ways of life.</p>
<p>showing ue to ces, etc.</p>	

C 7. Factors such as facilitating transportation,
 O
 N economic conditions, population growth, Discipline Area Language
 C
 E and increased leisure time have a great Subject Language
 P
 T influence on changes in land use and Problem Orientation Pop
centers of population density.

BEHAVIORAL OBJECTIVES

Cognitive: The student will help to form a list of objectives for a trip.
Affective: Children will voluntarily participate in a discussion on a teacher made question.
 Example: Why don't we leave the animals in the woods where they are happy instead of penning them up in parks or zoos? After they have had a poll of hands to show who wants to pen the animals, have discussion on the reasons they chose.

Skills to be Learned

Write letters
 List necessary things to be accomplished
 Writing stories

SUGGESTED LEARNING

I. Student-Centered in class activity

II

A. Classroom activities

1. Have children make believe he is one of the animals he knows and tell:
 - a. Where he lives
 - b. Where he wishes he could live
 - c. Why he is there
 - d. How he helps man or other animals
2. Make a bulletin board using the idea of the above activity.
3. Make believe some of the children are various animals in pens & others are human visitors, what would the animals talk about?

as facilitating transportation,

ons, population growth, Discipline Area Language Arts

isure time have a great Subject

Language Arts

anges in land use and
ation density.

Problem Orientation Population Grade K-1

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
udent a list a trip. en will ipate a ion. we in the re enning r zoos? d a how he ussion y chose.	<p>I. Student-Centered in class activity</p> <p>A. Classroom activities</p> <ol style="list-style-type: none">1. Have children make believe he is one of the animals he knows and tell:<ol style="list-style-type: none">a. Where he livesb. Where he wishes he could livec. Why he is thered. How he helps man or other animals2. Make a bulletin board —using the idea of the above activity.3. Make believe some of the children are various animals in pens & others are human visitors, what would the animals talk about?	<p>II. Outside Resource and Community Activities</p> <p>A. Outside activities</p> <ol style="list-style-type: none">1. Do necessary preparing for a bus field trip.<ol style="list-style-type: none">a. Lettersb. Phone callsc. Money neededd. List of what is to be observed or accomplished on the tripe. Discussion of how one should behave2. After the trip to a recreational area, the teacher will lead a discussion using all or some of these questions:<ol style="list-style-type: none">a. Why did we go to the trout ranch?b. Why do other people go?c. When is the trout ranch open to the public? Why?d. Why do people from far away come here?e. Where do these people come from?f. Why do we like these people to come here?g. Did these people always come from (cont.)

Resource and Reference Materials
Publications:

Continued and Additional Suggested Learning
II. (cont.)

Green Bay, Milwaukee, etc.? Why are now?

h. Do these people bring something we

i. Do these people bring something we
(Pollution)

j. What else happens because these pe
(Roads, materials for building, foo

3. Write a story about their trip.

Audio-Visual:

Pictures of what is done in
recreational areas

Community:

Resource unit such as:

Park

Zoo

Trout ranch

Swimming area

Water skiing area

Snowmobiling area

Fishing ponds

Boating area

als

Continued and Additional Suggested Learning Experiences

II. (cont.)

Green Bay, Milwaukee, etc.? Why are they coming now?

h. Do these people bring something we need? (Money)

i. Do these people bring something we don't need?
(Pollution)

j. What else happens because these people come north?
(Roads, materials for building, food)

3. Write a story about their trip.

C 8. Cultural, economic, social, and
O
N political factors determine status
C
E of man's values and attitudes
P
T toward his environment.

Discipline Area _____
Subject _____
Problem Orientation _____

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING	
<p><u>Cognitive:</u> Through recorded description, demonstrate their awareness of nature and by listening to other descriptions, demonstrate their ability to respect another person's ideas.</p> <p><u>Affective:</u> Notice and appreciate and describe items in their environment through the sense of touch. Share with others.</p>	<p>I. Student-Centered in class activity</p> <p>1. Read poem, "Abigail's Fingers" to class.</p>	<p>II</p>
<p><u>Skills to be Learned</u></p> <p>Observation</p> <p>Oral expression</p> <p>Tactile awareness</p> <p>Listening</p>		

al, economic, social, and

factors determine status

values and attitudes

s environment.

Discipline Area

Language Arts

Subject

Language Arts

Cultural

Problem Orientation

Attitudes

Grade

K

ORAL OBJECTIVES

Through re-
scription, demon-
stration awareness of
by listening to
descriptions, demon-
stration ability to
describe other person's

Notice and
describe
their environ-
ment in the sense
share with

What Learned

Attention
Awareness

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

1. Read poem, "Abigail's
Fingers" to class.

II. Outside Resource and
Community Activities

1. Have class go outside,
schoolyard or nearby park.
Feel and touch those things
which are touchable. (Stones,
grass, bugs, weeds, bark)
2. Have tape recorder along.
(More than one, if possible.)
Children can describe how
these things feel.
3. Later in the classroom, the
children can listen to the
tape. Maybe could think of
music they listen to that
would sound like their
descriptions.

Resource and Reference Materials

Publications:

Fingers Are Always Bringing Me News
by Mary O'Neill.

Audio-Visual:

Community:

Continued and Additional Suggested Lear

Materials

Continued and Additional Suggested Learning Experiences

ing Me News

C 10. Short-term economic gains may
 O
 N produce long-term environmental
 C
 E losses.
 P
 T

Discipline Area LarSubject Lar

Problem Orientation

BEHAVIORAL OBJECTIVES

Cognitive: The children will identify the necessities for life on a space ship by drawing or cutting pictures of the needed supplies for a trip in space.
Affective: Children will support the idea that the space ship is a limited ecosystem which can be compared to earth in the amount of time it can sustain life.

Skills to be Learned

Mental imagery
 Critical judgement
 Possible alterations
 Oral skills
 Motor skills
 Analogy - Earth is like a space ship

SUGGESTED LEARNING

I. Student-Centered in class activity

A. Classroom

1. Teacher diagrams on board along with class question & discussion.
 - a. Let's look at a space ship.
 - b. What would be in it? (Astronauts)
 - c. They are going out in space. What will they to stay alive? (Air, food, water, go-energy & fuel)
 - d. Can a car go without
 - e. Can they stay out in for a year? Why not? (Small space - limited air, food, water & go-must be carried within ship)
 - f. How long do you think will last? (Food, air for 2 weeks. Go-power week)
 - g. What will happen? (Astronauts will die)
2. The children will draw out pictures of food, air, which are needed for the trip.

economic gains may

rm environmental

Discipline Area Language Arts

Subject Language Arts

Conservation

Problem Orientation of Resources Grade K

OBJECTIVES

Children will
abilities
space ship by
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plies for

Children will
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a limited
can be
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can

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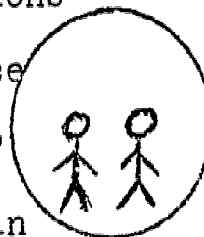
is like a

SUGGESTED LEARNING EXPERIENCES

**I. Student-Centered in class
activity**

A. Classroom

1. Teacher diagrams on board
along with class questions
& discussion.
 - a. Let's look at a space
ship.
 - b. What would be in it?
(Astronauts)
 - c. They are going out in
space. What will they need
to stay alive?
(Air, food, water, go-power,
energy & fuel)
 - d. Can a car go without gas?
 - e. Can they stay out in space
for a year? Why not?
(Small space - limited - All
air, food, water & go-power
must be carried within the
ship)
 - f. How long do you think it
will last? (Food, air, water
for 2 weeks. Go-power for 1
week)
 - g. What will happen? (Astronauts
will die)
2. The children will draw or cut
out pictures of food, air & water
which are needed for the space
trip.



**II. Outside Resource and
Community Activities**

Resource and Reference Materials
Publications:

Continued and Additional Suggested I

Audio-Visual:

Community:

ials

Continued and Additional Suggested Learning Experiences

C O N C E P T 10. Short-term economic gains may produce long-term environmental losses.

Discipline Area _____
 Subject _____
 Problem Orientation _____

BEHAVIORAL OBJECTIVES

Cognitive: Children will experience direct results of poor & wise use & poor & good planning in a classroom situation.
 Affective: Children will offer their responses to "Save Today for Tomorrow".

Skills to be Learned
 Oral skills
 Time limit planning
 Critical judgements
 Listening

SUGGESTED LEARNING

I. Student-Centered in class activity

A. Classroom

1. How many have ever been to a pot-luck supper or dinner? What is it for? (We take one thing & share many, in process of this activity.) Example - Mother says we will go to the pot-luck & shw will take a fruit cocktail cake with nuts & chocolate chips. If the cake was baked Sat. evening & you ate it for a breakfast snack Sunday morning, there would be no cake & no time to bake another, so you cannot go to the pot-luck.
2. How many days a week do we come to school? (5 days make up one school week)
3. I am going to give you enough crackers today (Monday) to last you a school week. You are to keep them in your box & each day, you will take the amount of crackers we ordinarily get with our milk break. Remember we are going to get 10 crackers just enough for 2 at each (con

term economic gains may

term environmental

Discipline Area Language Arts

Subject Language Arts

Problem Orientation Food Grade K

LEARNING OBJECTIVES

Children will
expect results
use & poor
ing in a
ation.
Children will
responses to
or tomorrow".

learned

planning
gements

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

A. Classroom

1. How many have ever been
to a pot-luck supper or
dinner? What is it for?
(We take one thing & share
many, in process of this
activity.) Example - Mother
says we will go to the pot-
luck & shw will take a
fruit cocktail cake with
nuts & chocolate chips. If
the cake was baked Sat.
evening & you ate it for a
breakfast snack Sunday
morning, there would be no
cake & no time to bake
another, so you cannot go
to the pot-luck.
2. How many days a week do we
come to school? (5 days make
up one school week)
3. I am going to give you enough
crackers today (Monday) to
last you a school week. You
are to keep them in your box &
each day, you will take the
amount of crackers we ordinarily
get with our milk break. Remember,
we are going to get 10 crackers,
just enough for 2 at each (cont.)

II. Outside Resource and
Community Activities

Resource and Reference Materials
Publications:

Continued and Additional Suggested Learning
I. (cont.)

day's milk break. If we eat them all
have any left for tomorrow? If you eat
day's usual amount, will you have enough
week? Have control group for demonstration
2 each day. Let other plan on own &
tally on board or chart.

Audio-Visual:

Community:

Materials	Continued and Additional Suggested Learning Experiences
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I. (cont.)

day's milk break. If we eat them all today, will we have any left for tomorrow? If you eat more than one day's usual amount, will you have enough to last all week? Have control group for demonstration that eat 2 each day. Let other plan on own & teacher keeps tally on board or chart.

ESEA Title III - 59-70-0135-1 Project I-C-E

C 10. Short-term economic gains may
O
N produce long-term environmental
C
E losses.
P
T

Discipline Area Language
Subject Language
Cons
Problem Orientation of P

BEHAVIORAL OBJECTIVES

Cognitive: Through answering questions about problems of over-usage in school, classroom & community, children will tell alternatives of good use & demonstrate environmental resources are limited & can run out without careful, planned use & distribution.
Affective: The students will create a puppet show pointing out situations of wise & unwise use.

Skills to be Learned

Creative writing
Critical thinking
Oral skills
Choosing good alternatives
Dramatization
Illustrating
Motor skills in making puppets

SUGGESTED LEARNING P

I. Student-Centered in class activity

A. Classroom

1. Class story, skits or puppet shows as results of teacher-given example. For motivation, use one of the 3 examples below:
a. Our janitor fills up the soap dispenser once a day before school with enough soap for the rest of the day, (if we use one pump when we wash our hands at each lavatory break & before lunch). Now some people here have kept pushing the dispensers & the soap has gone down the drain & not even used to clean hands. Someone used soap to wash mud off their shoes. Now if just half our class did this at morning recess, our soap would be all used up, & at dinner we would not be able to get hands clean & germs washed off well without soap. One half of (cont.)

economic gains may

environmental

Discipline Area Language Arts

Subject Language Arts

Conservation

Problem Orientation of Resources Grade K

ACTIVITIES	SUGGESTED LEARNING EXPERIENCES	
answering blems of , class- children es of te ces an out anned dents c show ons of	<p>I. Student-Centered in class activity</p> <p>A. Classroom</p> <p>1. Class story, skits or puppet shows as results of teacher-given example. For motivation, use one of the 3 examples below:</p> <p>a. Our janitor fills up the soap dispenser once a day before school with enough soap for the rest of the day, (if we use one pump when we wash our hands at each lavatory break & before lunch). Now some people here have kept pushing the dispensers & the soap has gone down the drain & not even used to clean hands. Someone used soap to wash mud off their shoes. Now if just half our class did this at morning resess, our soap would be all used up, & at dinner we would not be able to get hands clean & germs washed off well without soap. One half of (cont.)</p>	<p>II. Outside Resource and Community Activities</p>
natives king		

Resource and Reference Materials
Publications:

Continued and Additional Suggested Learning
I. (cont.)

Audio-Visual:

Photographs of wild flowers & trees

Community:

- our class would not even get their
clean once during the day if this
1. Divide the class into groups &
use too much of something & that
without anything for later use.
 2. Example - Using all red paper for
decorations & nothing left for V
 3. Teacher should point out that a
are limited & can develop to out
- b. If we had only 6 trees on our large
house & we cut them all down for fire
there wouldn't be any shade from house
1. Discussion: What might this period
there would be trees left & all
Example - Each time one is used,
planted, etc.
 2. Activity - Class could create a
with individual pictures, the story
poor management of trees.
- c. If we pick all the flowers in a wood
they would look beautiful in our house
two & then we have to throw them away
some flowers growing in the woods,
& grow again next year. Many people
see & enjoy them. The government tries
to keep people from picking too many
killing them off altogether.
1. Discussion of best alternatives
understanding.
 2. Have students tell what they would
some wild flowers would be left to
Some answers - do not pick at all
2. Have children plan dialogue & construct
on a puppet show pointing out situations
unwise uses.

Materials	Continued and Additional Suggested Learning Experiences
flowers & trees	<p>I. (cont.)</p> <p>our class would not even get their hands really clean once during the day if this kept up.</p> <ol style="list-style-type: none"> 1. Divide the class into groups & find other ways we use too much of something & that may leave us without anything for later use. 2. Example - Using all red paper for Christmas decorations & nothing left for Valentine's Day. 3. Teacher should point out that all mentioned uses are limited & can develop to outdoor environment. <p>b. If we had only 6 trees on our land or around our house & we cut them all down for fire wood in winter, there wouldn't be any shade from heat in summer.</p> <ol style="list-style-type: none"> 1. Discussion: What might this person do to be sure there would be trees left & all year around? Example - Each time one is used, two could be planted, etc. 2. Activity - Class could create a story & illustrate with individual pictures, the story pointing out poor management of trees. <p>c. If we pick all the flowers in a woods in spring, they would look beautiful in our home for a day or two & then we have to throw them away but if we let some flowers growing in the woods, they would re-seed & grow again next year. Many people would be able to see & enjoy them. The government tried to find ways to keep people from picking too many wild flowers & killing them off altogether.</p> <ol style="list-style-type: none"> 1. Discussion of best alternatives on grade level understanding. 2. Have students tell what they would do to make sure some wild flowers would be left to grow next year. Some answers - do not pick at all, put up fence, etc. <p>2. Have children plan dialogue & construct puppets to put on a puppet show pointing out situations of wise & unwise uses.</p>

C 10. Short-term economic gains may
 O
 N produce long-term environmental
 C
 E losses.
 P
 T

Discipline Area Language
 Subject Language
 Problem Orientation Con

BEHAVIORAL OBJECTIVES

Cognitive: Through dramatization by puppets, the children will show the long-term result of careless planning.
Affective: Children will voluntarily judge that short-term gains are not really gains at all in the long run.

Skills to be Learned
 Dramatization
 Discussion
 Audio skills

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
 - A. Classroom
 1. Read, Why the Bear Lost his Beautiful Tail to the children.
 2. In a discussion, point out the fact that the bear wanted to get something quickly & did it in a foolish way suffering a loss which could not be replaced.
 3. Have the children tell what the bear could have done which would have been more sensible. (It should have been planned.)
 4. The children can make puppets and act out the folktale.

economic gains may

term environmental

Discipline Area Language Arts

Subject Language Arts

Problem Orientation Conservation Grade K-1

OBJECTIVES

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s, the
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areless
ren will
e that short-
ot really
the long run.

rned

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

A. Classroom

1. Read, Why the Bear Lost
his Beautiful Tail to the
children.
2. In a discussion, point out
the fact that the bear wanted
to get something quickly &
did it in a foolish way
suffering a loss which could
not be replaced.
3. Have the children tell what
the bear could have done
which would have been more
sensible. (It should have
been planned.)
4. The children can make
puppets and act out the
folktale.

II. Outside Resource and
Community Activities

Resource and Reference Materials
Publications:

Story:

Why the Bear Lost his Beautiful
Tail

Continued and Additional Suggested Learning

Audio-Visual:

Community:

ce Materials	Continued and Additional Suggested Learning Experiences
s Beautiful	

C 11. Individual acts, duplicated

O

N or compounded, produce significant

C

E environmental alterations over time.

P

T

Discipline Area Language

Subject

Prose

Problem Orientation Co

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING

Cognitive: Dramatize either the story of Charlottes' Web or Smokey, the Bear.

Affective: If I left the soap in the sink & the dripping water dissolved all the soap, how could we get our hands clean?

Skills to be Learned

Discussion & analysis of story

Organization of story

Planning ideas

Motor skills

I. Student-Centered in class activity

A. Classroom

1. Read the book, Charlotte's Web to the children and then have an oral discussion:
 - a. Limited situation
 - b. Relate Wilbur's dependence on Charlotte
 - c. Charlotte's decision
 - d. Charlotte's sacrifice for her friends. (Wilbur's life depends on Charlotte's ingenuity.)
 - e. Charlotte's other alternatives & effects of choice
2. Class story: story cards.
3. Work on shadow boxes depicting any of the parts of the above mentioned. (Parts of plot)
 - a. Done in stand up figures inside a cut out cereal box
 - b. Cover the outside of box.
 - c. Display with a bulletin board with explanation of scenes.
4. This can also be dramatized (in skits, child planned) to show the plot & interaction

acts, duplicated

produce significant

alterations over time.

Discipline Area Language Arts

Subject Prose (Fiction)

Problem Orientation Conservation Grade K

OBJECTIVES

size either
Charlotte's
the Bear.
left the
& the
dissolved
could
clean?

turned
analysis of
story

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

A. Classroom

1. Read the book, Charlotte's
Web to the children and then
have an oral discussion:

- a. Limited situation
- b. Relate Wilbur's dependence
on Charlotte
- c. Charlotte's decision
- d. Charlotte's sacrifice for
her friends. (Wilbur's
life depends on Charlotte's
ingenuity.)
- e. Charlotte's other
alternatives & effects of
choice

2. Class story: story cards.

3. Work on shadow boxes
depicting any of the parts
of the above mentioned.
(Parts of plot)

a. Done in stand up figures
inside a cut out cereal box.

b. Cover the outside of box.

c. Display with a bulletin
board with explanation of
scenes.

4. This can also be dramatized
(in skits, child planned) to
show the plot & interaction

(cont.)

II. Outside Resource and
Community Activities

Continued and Additional Suggested Learning Experiences

I. (cont.)

& reaction of characters in story.

5. Read the story, Smokey, the Bear. Play the record, too.
- a. Have oral discussion. Facts about the background of Smokey, the Bear.
 - b. Make poster & pictures with fire prevention captions.
 - c. Watch film, Smokey, the Bear. 4 1/2 min., B&W.
 - d. Learn the song, Smokey, the Bear.

Problem Focused:

Charlotte's Web - Individual's attitude affects & influences his surroundings & environment.

Smokey, the Bear - Effects of carelessness with fire.

C 12. Private ownership must be

O

N regarded as a stewardship and

C

E should not encroach upon or violate

P

T the individual right of others.

Discipline Area Language

Subject Drama

Problem Orientation Story

BEHAVIORAL OBJECTIVES

Cognitive: Child will demonstrate by group & individual actions that their classmates rights must be respected. They solved problems through group consideration & action.

Affective: A child will show by his social activities in a classroom that private ownership must be regarded as a stewardship & must not encroach upon or violate the individual right of others.

Skills to be Learned

Planning
Oral skills
Dramatization
Motor skills
Following directions
Demonstration
Sharing knowledge with others

SUGGESTED LEARNING

I. Student-Centered in class activity

A. Classroom

1. Play acting & dramatization involving certain given situations. Skits showing:

a. Two or three children in a group to take a toy & act out what may when one owns a toy & must share it.

b. When there is two toys for three children.

c. Two children have two pin wheels amongst a group of five. (In dramatizing, two will not share or two will share with two others and one cannot get one) A sixth child comes with knowledge how to make one & shows all how to construct them so now each can have one.

2. The teacher & class can have a discussion about the skits and the ideas they show.

3. The children can construct their own pin wheels.

ownership must be

a stewardship and

encroach upon or violate

al right of others.

Discipline Area Language Arts

Subject Dramatization

Problem Orientation Stewardship Grade K

L OBJECTIVES

child will
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child will
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that private
be regarded
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or violate the
ht of others.

earned

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edge with

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

A. Classroom

1. Play acting & dramatization involving certain given situations. Skits showing:
 - a. Two or three children in a group to take a toy & act out what may when one owns a toy & must share it.
 - b. When there is two toys for three children.
 - c. Two children have two pin wheels amongst a group of five. (In dramatizing, two will not share or two will share with two others and one cannot get one) A sixth child comes with knowledge how to make one & shows all how to construct them so now each can have one.
2. The teacher & class can have a discussion about the skits and the ideas they show.
3. The children can construct their own pin wheels.

II. Outside Resource and
Community Activities

* Resource and Reference Materials
Publications:

Continued and Additional Sug

Audio-Visual:

Each child should have:

5 inch square of paper

pin

bead or cut off straw to use

pencil with eraser

Community:

ice Materials	Continued and Additional Suggested Learning Experiences
<p>ve: per aw to use</p>	

PROJECT I-C-E

Episode Evaluation Form (Reproduce or duplicate as needed)

In commenting on each episode used in your class, you may wish to use the following format. Please feel free to adapt it and add more pages. Let your comments be negative and positive.

I. Behavioral Objectives

A. Cognitive:

B. Affective:

II. Skills Developed

III. Suggested Learning Experiences

A. In Class:

B. Outside & Community Activities

IV. Suggested Resource & Reference Materials (specific suggestions & comments)

PROJECT I-C-E

Episode Evaluation Form (Reproduce or duplicate as needed)

on each episode used in your class, you may wish to duplicate this suggested feel free to adapt it and add more pages. Let us know all your critiques and ive and positive.

Objectives
e:

e:

loped

earning Experiences
:

& Community Activities

esource & Reference Materials
uggestions & comments)

Project I - C - E

INSTRUCTION - CURRICULUM - ENVI

ED055919

SUPPLEMENTARY PROGRAM FOR ENVIRONMENTAL EDUCATION

DISCIPLINE AREA Language Arts Grade 1

Produced under Title III E.S.E.A.
PROJECT I-C-E
Serving Schools in CESA's 3-8-9
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Rober
Rober
Georg

- C - E

INSTRUCTION - CURRICULUM - ENVIRONMENT

MENTARY PROGRAM FOR ENVIRONMENTAL EDUCATION

E AREA Language Arts Grade 1

under Title III E.S.E.A.

-C-E

schools in CESA's 3-8-9

Street

, Wisconsin 54301

-4338

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PREFACE

If you wish to excite students about their environment, help of over a hundred teachers, year long meetings, a summer workshop with ecologists, this guide means realistic, developed aid for you. which have directed teachers in writing and editing this guide.

1. This guide is supplementary in nature and the episodes are designed--to plug into existing, logical course content.
2. Each page or episode offers suggestions. Since you know you will have to adapt, adopt, or use. Be design, the range of suggestions for implementation and usage are even wider. Many episodes are self-contained and others can be changed in part or developed more keenly over possibilities allow you to explore.
3. Now we urge that you try the episodes and suggested learning plan. The reasons are simple. No guide has all the answers unless viewed in the context of your classroom situation. Try to give it a triple reading, check over the resources listed, make prime your students, and seek help. The Project personnel and knowledge page stand ready to aid your efforts. Feel free to contact us.
4. The Project Resource Materials Center serves all CESA 3, 8, 9, 10, 11, 12, and private. We will send available materials pre-paid. Call for a visit. Phone 432-4338.
5. Check often the Project ICF materials in your school library. Center materials. Please offer suggestions, comments, or advice. Your service may grow. Let's help each other.
6. Involve yourself with the guide by reacting to it with suggestions on the episode pages or use the attached evaluation form. lected in late May next year and will be used in our revision. reactions and suggestions--negative and positive. Please note that in the episodes may refer to specific, local community resources, cases, individual school districts and teachers will have to substitute. A list of terms pertinent to the episodes is below.
7. Ecologists and other experts have simplified the issue--survival. Creation's beauty and complexity--often noted as the work of man and human energy to save. A year's work by a hundred of you is a gesture. Without you, their work will crumble, and so might our world. let us live to think, feel, and act in harmony with our world.

1. Cognitive means a measurable mental skill, ability, or process.
2. Affective refers to student attitudes, values, and feelings.
3. APWI means Acceptable Performance Will Include (labels a process).
4. EPA - Environmental Problem Area.

PREFACE

excite students about their environment, help is ready. Thanks to the efforts of teachers, year long meetings, a summer workshop, university consultants and this guide means realistic, developed aid for you. Please note the following ideas suggested by teachers in writing and editing this guide.

Supplementary in nature and the episodes are designed--at appropriate instances--into existing, logical course content.

Each episode offers suggestions. Since you know your students best, you decide what to try, or use. By design, the range of suggestions is wide; your chances for experimental usage are even wider. Many episodes are self-contained, others open-ended, still others changed in part or developed more keenly over a few weeks. These built-in changes allow you to explore.

As you try the episodes and suggested learning experiences but please pre-plan your lessons are simple. No guide has all the answers and no curriculum will work in the context of your classroom situation. Thus, before trying an episode, do some reading, check over the resources list, make mental and actual notes, discuss with students, and seek help. The Project personnel and teachers listed on the acknowledgment page stand ready to aid your efforts. Feel free to ask their help in pre-planning. The Source Materials Center serves all CESA 3, 8, and 9 area schools--public and private--and will send available materials pre-paid. Call for any help, materials, or to 432-4338.

See the Project ICE Bibliography in your school library for available Resource Materials. Please offer suggestions, comments, or advice--at any time--so that this work can grow. Let's help each other.

Work with the guide by reacting to it with scratch ideas, notes, and extended responses on the episode pages or use the attached evaluation format, which will be collected May next year and will be used in our revisions. We sincerely want your suggestions--negative and positive. Please note that some resources listed may refer to specific, local community resources or conditions. In such cases, individual school districts and teachers will have to adopt local or available substitutes. A list of terms pertinent to the episodes is below.

Other experts have simplified the issue--survival--yours, mine, our students', and the complexity--often noted as the work of a genius--will take our genius to save. A year's work by a hundred of your fellow teachers is a saving grace for you, their work will crumble, and so might we all--literally. Instead, let's think, feel, and act in harmony with our world.

Editorial Board

Performance a measurable mental skill, ability, or process based on factual data. Attitudes refers to student attitudes, values, and feelings.

Acceptable Performance Will Include (labels a cognitive or mental performance.)
Environmental Problem Area.

ACKNOWLEDGEMENTS: The following teachers and consultants participated of the Supplementary Environmental Education Guide.

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of the Supplementary Environmental Education Guide.

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John Hussey, Green Bay
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Robert Cook, UWGB
Dennis Bryan, UWGB

C Energy from the sun, the basic source
 O
 N of all energy, is converted through
 C
 E plant photosynthesis into a form all
 P
 T living things can use for life pro-
 cesses.

Discipline Area
 Subject
 Problem Orientation

BEHAVIORAL OBJECTIVES

Cognitive: The child will show the effects of the wind and the sun by participating in a dramatization of the fable, acting the parts of the wind and sun. The child will recall two ways the sun helps or harms us.
Affective: The childrer will ask questions about the sun as stimulated by the teacher.

Skills to be Learned

Listening
 Promote sensory image of how sun and wind feel and sound.
Vocabulary

SUGGESTED LEARNING ACTIVITIES

- I. Student-Centered in class activity
 1. What are fables?
 2. Reading the fable, "The Sun & the Wind."
 3. Discuss difference between hot sunny days and cold windy days.
 4. Dramatize the fable.
 5. Set up questions as:
 Who was the strongest?
 What can the sun and wind do for plants?
 6. Summarizing the concept that sometimes the sun and wind help us and sometimes they harm us: each child do an experiment a blow balloon till it bursts, melt butter in the sun, dish of water in sun to show evaporation.

the sun, the basic source

is converted through

Discipline Area

Language Arts

thesis into a form all

Subject

Language Arts

can use for life pro-

Problem Orientation Energy Use

Grade 1

cesses.

OBJECTIVES

Child will
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children
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feel and

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. What are fables?
2. Reading the fable, "The Sun & the Wind."
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blow balloon till it bursts, melt butter in the sun, dish of water in sun to show evaporation.

II. Outside Resource and Community Activities

Resource and Reference Materials

Publications:

Fable - "Sun and the Wind"
"Who Has Seen the Wind," by
Rosetti
"The Wind," by R. L.
Stevenson.

Audio-Visual:

Calendar
Thermometer
Crepe-paper streamer
Electric fan
Pictures
Catalogs, to cut pictures
from that show how we
dress for different
weather.
Film(strip) on seasons

Community:

Continued and Additional Suggested Learning Expe

Continued and Additional Suggested Learning Experiences

C 2. All living organisms interact among
 O themselves and their environment,
 N
 C forming an intricate unit called an
 E
 P
 T ecosystem.

Discipline Area Language
 Subject Language
 Problem Orientation Ec

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING
<p><u>Cognitive:</u> The students will learn to recognize some animals by name through pictures. The student will learn to recognize some birds by name through pictures. The student will write an informational article on the needs of his choice of animal & bird.</p> <p><u>Affective:</u> As the student participates in learning & doing, he will seek other examples of animals and how they live in their environment.</p>	<p>I. Student-Centered in class activity</p> <p>A. Class:</p> <ol style="list-style-type: none"> 1. Read: <u>The Kitchen-Window Squirrel</u> by Harold Longman Let above introduce: <ol style="list-style-type: none"> a. Animals of neighborhood b. Birds of neighborhood 2. List wild animals (mammal of neighborhood & find pictures of adults & babies. Make bulletin board, learn to recognize names. 3. Have animal information read by teacher. Children write an informational article for one or more animals. A booklet could be made of stories. 4. Have a class period in which each child has a chance to tell when he saw one of these animals. 5. Discuss how many of these animals live here--why not more or less. 6. Put up bird pictures, have children learn to recognize them by picture. Have personal charts made & have each child check if he sees bird each day of week. (cont.
<p><u>Skills to be Learned</u></p> <p>Listening for information</p> <p>Writing an informational article</p> <p>Looking for a bird & naming it</p>	

isms interact among

r environment,

Discipline Area Language Arts

e unit called an

Subject Language Arts

Problem Orientation Ecosystem Grade 1

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
ts will ome ugh t will ome birds ures. The n infor- the needs nal & udent ning & other and ir	<p>I. Student-Centered in class activity</p> <p>A. Class:</p> <ol style="list-style-type: none">1. Read: <u>The Kitchen-Window Squirrel</u> by Harold Longman. Let above introduce:<ol style="list-style-type: none">a. Animals of neighborhoodb. Birds of neighborhood2. List wild animals (mammals) of neighborhood & find pictures of adults & babies. Make bulletin board, learn to recognize names.3. Have animal information read by teacher. Children write an informational article for one or more animals. A booklet could be made of stories.4. Have a class period in which each child has a chance to tell when he saw one of these animals.5. Discuss how many of these animals live here--why not more or less.6. Put up bird pictures, have children learn to recognize them by picture. Have personal charts made & have child check if he sees bird each day of week. (cont.)	<p>II. Outside Resource and Community Activities</p> <p>A. Outside activity</p> <ol style="list-style-type: none">1. Take field trips to school yard & neighboring woods to see birds.2. Write a letter to ask permission to visit neighbor's woods.<ol style="list-style-type: none">a. Take a field trip & list all animal life seen.
mation ional &		

Continued and Additional Suggested

I. (cont.)

7. As a culminating activity, ha-

about how living organisms rea-

Begin with a question such as:

a. What would happen if the sky
other day would come out whi

Community:

rials

Continued and Additional Suggested Learning Experiences

I. (cont.)

7. As a culminating activity, have a discussion about how living organisms react to each other.

Begin with a question such as:

a. What would happen if the skunk we smelled the other day would come out while we have recess?

C 3. Environmental factors are limiting
 O on the numbers of organisms living
 C with their influence, thus, each
 P environment has a carrying capacity.
 T

Discipline Area _____

Subject _____

Problem Orientation _____

ESEA Title III - 59-70-0135-1 Project I-C-E

BEHAVIORAL OBJECTIVES	SUGGESTED LEAF
<p><u>Cognitive:</u> The student will give an imaginative talk telling what happened to him as a frog, the student will find rhyming words in a poem.</p> <p><u>Affective:</u> Each child decides if all frog eggs hatched and all frogs lived would there be room in the pond?</p>	<p>I. Student-Centered in class activity</p> <ol style="list-style-type: none"> 1. Read & enjoy poem "Twenty Froggies" by George Cooper 2. Have children bring in frog eggs for observation. Have one aquarium with a few eggs and one aquarium overstocked with eggs. Have children watch results. 3. Have children give talks in which they make believe they are tadpoles or little frogs and tell what happened to himself. 4. Discuss what would happen if all the eggs hatched & the frogs lived in the ponds around school. Include food, shelter, space, enemies. 5. Make chart of the life cycle of a frog or where frogs live. 6. Learn to sing "Twenty Froggies." 7. Make a bulletin board about frogs.
<p><u>Skills to be Learned</u></p> <p>Giving an imaginative talk</p> <p>Listening for rhyming words</p> <p>Making accurate observations of the developing frog eggs.</p>	

factors are limiting

organisms living

fluence, thus, each

a carrying capacity.

Discipline Area

Subject

Problem Orientation

Language Arts

Language Arts

Population

Density

Grade

1

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	PERIENCES
udent native happened the rhyming child g eggs ogs lived m in the	<p>I. Student-Centered in class activity</p> <ol style="list-style-type: none">1. Read & enjoy poem "Twenty Froggies" by George Cooper.2. Have children bring in frog eggs for observation. Have one aquarium with a few eggs and one aquarium overstocked with eggs. Have children watch results.3. Have children give talks in which they make believe they are tadpoles or little frogs and tell what happened to himself.4. Discuss what would happen if all the eggs hatched & the frogs lived in the ponds around school. Include food, shelter, space, enemies.5. Make chart of the life cycle of a frog or where frogs live.6. Learn to sing "Twenty Froggies."7. Make a bulletin board about frogs.	<p>II. Outside Resource and Community Activities</p> <ol style="list-style-type: none">1. Have children look in library to find life cycle of frog.
ed tive ming bser- eloping		

Resource and Reference Materials
Publications:

Poems:

Twenty Froggies by George Cooper.

Audio-Visual:

Aquarium

Frog eggs

Community:

Continued and Additional Suggested Le

Materials	Continued and Additional Suggested Learning Experiences
Cooper.	

C 4. An adequate supply of pure
 O
 N water is essential for life.
 C
 E
 P
 T

Discipline Area _____ Language _____
 Subject _____ Language _____
 Adequacy _____
 Problem Orientation _____ Water _____

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES
<p><u>Cognitive:</u> The learner will tell a story about going without water. The learner will list ways he uses water at school.</p> <p><u>Affective:</u> The class will offer ways in which they use water. The list will be written on board.</p>	<p>I. Student-Centered in class activity</p> <ol style="list-style-type: none"> 1. Show pictures of the many places in the world where water is found (ocean, lake, pond, river) 2. Show pictures of where there isn't water (deserts, tundras)
<p><u>Skills to be Learned</u></p> <p>Listing what could not be done if there was no water</p> <p>Giving a talk about the need of water</p> <p>Story-telling</p>	<ol style="list-style-type: none"> 3. Make bulletin board of above pictures. 4. To see if water is essential, the children will not use any water for a given amount of time. 5. Children will list all things they were not able to do because of not being able to use water. 6. Children will tell story about <ol style="list-style-type: none"> a. how they felt when they couldn't use water b. why he needs water 7. The children could try to figure out a lunch menu or meal which would not use water.

pure

fe.

Discipline Area Language Arts

Subject

Language Arts

Adequate

Problem Orientation

Water Supply

Grade

K-1

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. Show pictures of the many places in the world where water is found (ocean, lake, pond, river)
2. Show pictures of where there isn't water (deserts, tundras)
3. Make bulletin board of above pictures.
4. To see if water is essential, the children will not use any water for a given amount of time.
5. Children will list all things they were not able to do because of not being able to use water.
6. Children will tell story about
 - a. how they felt when they couldn't use water
 - b. why he needs water
7. The children could try to figure out a lunch menu or meal which would not use water.

II. Outside Resource and Community Activities

Resource and Reference Materials
Publications:

Continued and Additional Suggest

Audio-Visual:

pictures of where
water is found & where
water is not found

Community:

Materials

Continued and Additional Suggested Learning Experiences

C 5. An adequate supply of clean air is

O

N essential because most organisms

C

E depend on oxygen, through respiration,

P

T to release the energy in their food.

Discipline Area Language

Subject Language

Problem Orientation Clean

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
<p><u>Cognitive:</u> Understand what air pollution is by watching experiments.</p> <p><u>Affective:</u> Each child will be given the opportunity to contribute to a class board list, any odor which has been brought to him by moving air.</p>	<p>I. Student-Centered in class activity</p> <p>A. Activities:</p> <ol style="list-style-type: none"> 1. Airsprays 2. Fans 3. Kites 4. Balloons 5. Chimneys 	<p>II. O-</p> <p>Con</p> <p>A.</p> <p>p</p> <p>o</p> <p>c</p> <p>p</p> <p>B.</p> <p>o</p> <p>c</p> <p>a</p> <p>t</p>
<p><u>Skills to be Learned</u></p> <p>Increase acuity in observance</p>		

supply of clean air is

use most organisms

Discipline Area Language Arts

en, through respiration, Subject

Language Arts

energy in their food.

Problem Orientation Clean air

Grade 1

OBJECTIVES

Understand what
by watching

Each child will
opportunity to
class board
which has
him by

Learned
in

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

A. Activities:

1. Airsprays
2. Fans
3. Kites
4. Balloons
5. Chimneys

II. Outside Resource and
Community Activities

- A. Make windmills & pin onto pencil eraser. Take them out in air to show air current. Air moves & polluted air comes to us.
- B. Cover a picture frame or cardboard frame with cheese cloth. Hang it in a tree & observe the things that catch on to it.

Resource and Reference Materials

Publications:

Who Has Seen The Wind

Audio-Visual:

Kites, balloons, paper
Cheese cloth & frame
Plastic bottle-cigarette

Community:

Continued and Additional Sugges

e Materials

Continued and Additional Suggested Learning Experiences

te

C 6. Natural resources are not equally

O

N distributed over the earth or over

C

E time and greatly affect the geographic

P

T conditions and quality of life.

Discipline Area _____

Subject _____

Problem Orientation _____

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING ACTIVITIES
<p><u>Cognitive:</u> The student will listen to a story & show understanding by planting his seeds and comparing plant life in different areas, giving reasons why the plant life is different.</p> <p><u>Affective:</u> Teacher makes list on chalk board. Children will place a <u>W</u> or <u>S</u> before name of resource (Apple, Banana) that has to be shipped into our area either in summer and/or winter.</p>	<p>I. Student-Centered in class activity</p> <ol style="list-style-type: none"> 1. Read "Seeds & More Seeds" by Millicent Selsam. 2. Plant seeds & care for them. 3. Give talk in about a week's time telling why or why not the seeds grew (too much or too little water) 4. Discuss - Could parts of the world be like reasons in No. 3. 5. Make bulletin board showing swamps, deserts, good farm land, woods. 6. Show pictures of many kinds of vegetables, fruits, & cereals. Choose those that grow in community. Where do others grow? Why? 7. Make a booklet of: <ol style="list-style-type: none"> a. Fruits growing in community & those shipped in all the time or part of the time. b. Same as (a) but use vegetables. c. Same as (a) but with flowers. 8. Have an exhibit of No. 7.
<p><u>Skills to be Learned</u></p> <p>Carrying out an individual project</p> <p>Comparing (land areas, requirement of different plant life)</p> <p>Organizing a talk</p> <p>Classifying</p>	

resources are not equally

the earth or over

Discipline Area

Language Arts

affect the geographic

Subject

Comparison & Discussion

quality of life.

Problem Orientation Resource Usage Grade 1

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
Student tory & by and fe in iving ant life r makes d. Chil- W or S ource at has our mer	<p>I. Student-Centered in class activity</p> <ol style="list-style-type: none">1. Read "Seeds & More Seeds" by Millicent Selsam.2. Plant seeds & care for them.3. Give talk in about a week's time telling why or why not the seeds grew (too much or too little water)4. Discuss - Could parts of the world be like reasons in No. 3.5. Make bulletin board showing swamps, deserts, good farm land, woods.6. Show pictures of many kinds of vegetables, fruits & cereals. Choose those that grow in community. Where do others grow? Why?7. Make a booklet of:<ol style="list-style-type: none">a. Fruits growing in community & those shipped in all the time or part of the time.b. Same as (a) but use vegetables.c. Same as (a) but with flowers.8. Have an exhibit of No. 7.	<p>II. Outside Resource and Community Activities</p> <ol style="list-style-type: none">1. Visit schoolyard or neighborhood areas which show swamps, drainage ditches, sand hills, etc. On trip, compare what grows in each area.
ed ndividual reas, ferent		

Resource and Reference Materials
Publications:

Seeds & More Seeds by Millicent
Selsam.

Continued and Additional Suggested

Audio-Visual:

Seeds - peas, garden beans
& soybeans best.

Containers in which to plant

Pictures of swampy areas, deserts,
good farm land, woods.

Pictures fresh fruits, vegetables,
flowers

Real fruits & vegetables for a
display

Community:

Materials	Continued and Additional Suggested Learning Experiences
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serts,

ables,

a

C 7. Factors such as facilitating transportation,
O
N economic conditions, population growth, Discipline Area Language
C
E and increased leisure time have a great Subject Language
P
T influence on changes in land use and Problem Orientation Pop
centers of population density.

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING EXPERIENCES

Cognitive: The student will help to form a list of objectives for a trip.
Affective: Children will voluntarily participate in a discussion on a teacher made question.
Example: Why don't we leave the animals in the woods where they are happy instead of penning them up in parks or zoos? After they have had a poll of hands to show who wants to pen the animals, have discussion on the reasons they chose.

Skills to be Learned

Write letters
List necessary things to be accomplished
Writing stories

I. Student-Centered in class activity

A. Classroom activities

1. Have children make believe he is one of the animals he knows and tell:
 - a. Where he lives
 - b. Where he wishes he could live
 - c. Why he is there
 - d. How he helps man or other animals
2. Make a bulletin board using the idea of the above activity.
3. Make believe some of the children are various animals in pens & others are human visitors, what would the animals talk about?

II.

s facilitating transportation,

ns, population growth. Discipline Area Language Arts

sure time have a great Subject Language Arts

ages in land use and Problem Orientation Population Grade K-1
ation density.

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
udent a list a trip. en will ipate a ion. we in the re enning r zoos? d a how he ussion y chose. ed ings to	<p>I. Student-Centered in class activity</p> <p>A. Classroom activities</p> <ol style="list-style-type: none">1. Have children make believe he is one of the animals he knows and tell:<ol style="list-style-type: none">a. Where he livesb. Where he wishes he could livec. Why he is thered. How he helps man or other animals2. Make a bulletin board using the idea of the above activity.3. Make believe some of the children are various animals in pens & others are human visitors, what would the animals talk about?	<p>II. Outside Resource and Community Activities</p> <p>A. Outside activities</p> <ol style="list-style-type: none">1. Do necessary preparing for a bus field trip.<ol style="list-style-type: none">a. Lettersb. Phone callsc. Money neededd. List of what is to be observed or accomplished on the tripe. Discussion of how one should behave2. After the trip to a recreational area, the teacher will lead a discussion using all or some of these questions:<ol style="list-style-type: none">a. Why did we go to the trout ranch?b. Why do other people go?c. When is the trout ranch open to the public? Why?d. Why do people from far away come here?e. Where do these people come from?f. Why do we like these people to come here?g. Did these people always come from (cont.)

Resource and Reference Materials
Publications:

Audio-Visual:

Pictures of what is done in
recreational areas

Community:

Resource unit such as:

Park

Zoo

Trout ranch

Swimming area

Water skiing area

Snowmobiling area

Fishing ponds

Boating area

Continued and Additional Suggested Learning
II. (cont.)

Green Bay, Milwaukee, etc.? Why
now?

h. Do these people bring something

i. Do these people bring something
(Pollution)

j. What else happens because these
(Roads, materials for building,

3. Write a story about their trip.

erials

Continued and Additional Suggested Learning Experiences

II. (cont.)

Green Bay, Milwaukee, etc.? Why are they coming now?

h. Do these people bring something we need? (Money)

i. Do these people bring something we don't need?
(Pollution)

j. What else happens because these people come north?
(Roads, materials for building, food)

3. Write a story about their trip.

C 8. Cultural, economic, social, and
 O
 N political factors determine status
 C
 E of man's values and attitudes
 P
 T toward his environment.

Discipline Area _____ Language _____
 Subject _____ Language _____
 Problem Orientation _____ Land Use _____
 Attitude _____

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES
<p><u>Cognitive:</u> The student will write a letter asking permission and will choose one of the following to tell what happened on the trip: write, discuss, or list things.</p> <p><u>Affective:</u> How will you help to have a pretty place as we have one today?</p>	<p>I. Student-Centered in class activity</p> <ol style="list-style-type: none"> 1. Read "The Clean Brook" by Margaret Bartlett. 2. After field trip: Write or discuss about "I Liked The Field Trip" or "I Did Not Like The Field Trip." 3. Write or discuss: What Can I Do To Enjoy The Out-of doors More Often? <ol style="list-style-type: none"> a. learn more about it b. go to the woods more often c. preserve it d. don't pollute it 4. Identify specimens taken on field trip. 5. Write story of what was done on trip in sequential order.
<p><u>Skills to be Learned</u></p> <p>Letter writing Making lists of necessary things to be done Identifying specimens Writing down one's thoughts on a specified topic Writing a story in sequence</p>	<p>II. Out-of-class activity</p> <ol style="list-style-type: none"> 1. Field trip <ol style="list-style-type: none"> a. Use own space b. Observe c. Use space d. Use space 1) _____ 2) _____ 3) _____ 4) _____ 5) _____ 6) _____ 7) _____

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Discipline Area

Language Arts

Subject

Language Arts

Land Use

Problem Orientation

Attitudes

Grade

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SUGGESTED LEARNING EXPERIENCES

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I. Student-Centered in class activity

1. Read "The Clean Brook" by Margaret Bartlett.

2. After field trip: Write or discuss about "I Liked The Field Trip" or "I Did Not Like The Field Trip."

3. Write or discuss: What Can I Do To Enjoy The Out-of doors More Often?
a. learn more about it
b. go to the woods more often
c. preserve it
d. don't pollute it

4. Identify specimens taken on field trip.

5. Write story of what was done on trip in sequential order.

II. Outside Resource and Community Activities

1. Field trip

a. Write for permission to use private roadway, privately owned area, & permission from parent to go.

b. Collect jars & boxes for specimens.

c. Discuss behavior on trip

d. Teacher point out on trip:

1) plant life

2) water life

3) quietness

4) what noise does to area

5) have all sit around &

discuss what is seen

6) Have children, with paper & crayons, draw something in area

7) Eat lunch and proceed to classroom

Materials	Continued and Additional Suggested Learning Experiences
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garet

children

C 3. Cultural, economic, social, and
O
N political factors determine status
C
E of man's values and attitudes
P
T toward his environment.

Discipline Area _____
Subject _____
Problem Orientation _____

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING
<p><u>Cognitive:</u> The child will observe what happens to the resource snow under given circumstances by taking part in experiments that cause this change.</p> <p>a. melting snow b. Spring rain</p> <p><u>Affective:</u> Is Water best standing still or moving?</p>	<p>I. Student-Centered in class activity</p> <p>1. Demonstration of what happens to snow.</p> <p>2. Activities: Two pans in room:</p> <p>a. One filled with snow 1) Evaporates</p> <p>b. Soil covered with snow 1) earth absorbs moisture</p> <p>c. Keep chart of which melts first - time it takes - what happens</p>
<p><u>Skills to be Learned</u></p> <p>Make trips to nearby creeks and rivers</p> <p>Observation of experiment</p> <p>Demonstrate a simple experiment</p> <p>Listen for information</p> <p>Oral reports on observations</p>	<p>3. As snow melts in spring, water finds its way to our creeks & rivers</p> <p>a. box filled with dirt. soil piled high on one side. Pour water on high side to show how water finds its way to lower levels (creeks).</p> <p>4. Flooding caused by swelling of rivers:</p> <p>a. Sand box made into level land, rivers, valleys, & high elevations.</p> <p>5. People lose homes from floods.</p> <p>a. Make milk carton houses (for city) & trees for villages. Pour water (Cont.)</p>

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Discipline Area

Language Arts

Subject

Language Arts

Attitudes Toward

Problem Orientation

Water

Grade

1

OBJECTIVES

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snow under
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change.

water best
? moving?

ned
earby creeks
experiment
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observations

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
 1. Demonstration of what happens to snow.
 2. Activities: Two pans in room:
 - a. One filled with snow
 - 1) Evaporates
 - b. Soil covered with snow
 - 1) earth absorbs moisture
 - c. Keep chart of which melts first - time it takes - what happens
 3. As snow melts in spring, water finds its way to our creeks & rivers
 - a. box filled with dirt. soil piled high on one side. Pour water on high side to show how water finds its way to lower levels (creeks).
 4. Flooding caused by swelling of rivers:
 - a. Sand box made into level land, rivers, valleys, & high elevations.
 5. People lose homes from floods.
 - a. Make milk carton houses (for city) & trees for villages. Pour water (Cont.)

II. Outside Resource and Community Activities.

Resource and Reference Materials

Publications:

News Pilot (Scholastic)

Audio-Visual:

pans with soil & water
sand box
newspaper pictures
posters - the inspring beauty of
our natural environment
Film - "Winter Snows"

Community:

Continued and Additional Sugges

I.(Cont.)

- swiftly into the rivers.
to milk carton houses and
b. Make two trees - cut one
one down from top and sli
6. Draw pictures in sequence
to become water.

Materials	Continued and Additional Suggested Learning Experiences
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I.(Cont.)

- swiftly into the rivers. Watch what happens to milk carton houses and trees.
- b. Make two trees - cut one up from bottom, one down from top and slip together to stand.
- 6. Draw pictures in sequence of how snow melts to become water.

uty of

C 10. Short-term economic gains may
O
N produce long-term environmental
C
E losses.
P
T

Discipline Area Lang
Subject Lang
Problem Orientation C

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING
<p><u>Cognitive:</u> Through dramatization by puppets, the children will show the long-term result of careless planning.</p> <p><u>Affective:</u> Children will voluntarily judge that short-term gains are not really gains at all in the long run.</p>	<p>I. Student-Centered in class activity</p> <p>A. Classroom</p> <ol style="list-style-type: none"> 1. Read, <u>Why the Bear Lost his Beautiful Tail</u> to the children. 2. In a discussion, point out the fact that the bear was to get something quickly did it in a foolish way suffering a loss which could not be replaced. 3. Have the children tell what the bear could have done which would have been more sensible. (It should have been planned.) 4. The children can make puppets and act out the folktale.
<p><u>Skills to be Learned</u></p> <p>Dramatization</p> <p>Discussion</p> <p>Audio skills</p>	

term economic gains may

g-term environmental

Discipline Area Language Arts

Subject Language Arts

Problem Orientation Conservation Grade K-1

AL OBJECTIVES

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pets, the
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children will
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in the long run.

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

A. Classroom

1. Read, Why the Bear Lost
his Beautiful Tail to the
children.
2. In a discussion, point out
the fact that the bear wanted
to get something quickly &
did it in a foolish way
suffering a loss which could
not be replaced.
3. Have the children tell what
the bear could have done
which would have been more
sensible. (It should have
been planned.)
4. The children can make
puppets and act out the
folktale.

II. Outside Resource and
Community Activities

Materials	Continued and Additional Suggested Learning Experiences
<u>Beautiful</u>	

C 11. Individual acts, duplicated
 O
 N or compounded, produce significant
 C
 E environmental alterations over time.
 P
 T

Discipline Area Language
 Subject Language
 Problem Orientation Litt

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
<p>Cognitive: During a week's period the children will make a graph & put checks behind their names as to how many pieces of litter they have picked up. Give a short oral report on the effect of their own private clean-up campaign.</p> <p>Affective: On the way to & from school, the child will watch for litter. This will be reported on the next day with ideas of what should have been done with the litter.</p>	<p>I. Student-Centered in class activity</p>	<p>II. Out</p> <p>Comm</p> <p>A. O</p> <p>1</p> <p>2</p> <p>3</p> <p>4</p>
<p><u>Skills to be Learned</u></p> <p>Observing</p> <p>Speaking</p> <p>Vocabulary enrichment</p> <p>Litter - pollution & street cleaners</p>		

...s, duplicated

...duce significant

...erations over time.

Discipline Area Language Arts

Subject Language Arts

Problem Orientation Littering Grade 1

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
a week's will checks as to litter . Give on the private way to child er. This the of en r.	I. Student-Centered in class activity	II. Outside Resource and Community Activities A. Outside classroom 1. Yard trip for children to see the articles that have been dropped by careless people. 2. Field trip to a park or picnic ground to arouse feelings in children about environment used by the public. 3. Reports after they return to school. 4. Drawings of the devastation that was caused at park or picnic grounds.
d ent &		

Resource and Reference Materials	Continued and Additional Suggested Learning
<p><u>Publications:</u></p> <p>Smokey, the Bear, story & song Keep Our World Clean, song sheet available at CESA #9 Office This Land is Your Land, song sheet</p> <p><u>Audio-Visual:</u></p> <p>TV - radio, newspaper articles to report on Conservation film</p> <p><u>Community:</u></p> <p>Neighborhood trips Resource person from Conservation Dept. Pick up things on their way to school as their contribution to "Clean Up"</p>	

Materials	Continued and Additional Suggested Learning Experiences
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C 11. Individaul acts, duplicated
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 N or compounded, produce significant
 C
 E environmental alterations over time.
 P
 T

Discipline Area Language
 Subject Language
 Problem Orientation Environ
 Caus

BEHAVIORAL OBJECTIVES

Cognitive: The student will learn how to properly use a telephone. The student will also discuss how our land should be treated & compare the past, present & future.
Affective: Using pictures of land areas which have been harmed or left unharmed, each child will explain what caused the good or bad situation.

Skills to be Learned

Learning to make a polite telephone call
 Time lapses
 Speech skills:
 Introduction
 Clarity
 Closing

SUGGESTED LEARNING E

I. Student-Centered in class activity

A. Classroom

1. Discuss telephone etiquette.
2. Place a telephone call to get permission to walk on neighbor's field.

II.

ESEA Title III - 59-70-0135-1. Project I-C-E

acts, duplicated

produce significant

alterations over time.

Discipline Area Language Arts

Subject Language Arts

Environmental Change

Problem Orientation Caused by Man Grade 1

OBJECTIVES

student will
properly use a
student will
our land
& compare
& future.
pictures
which have
left unharmed,
explain what
or bad

earned
ke a polite
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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

A. Classroom

1. Discuss telephone
etiquette.
2. Place a telephone
call to get permission
to walk on neighbor's
field.

II. Outside Resource and
Community Activities

A. Out of class

1. Visit a farm field.
2. Sit down at field's
edge & talk about:
 - a. What was this like
when your grandfather
was a little boy or
when Indians were here?
 - b. What has been done to
land since then?
 - c. Why has this been
done?
 - d. What will this land
be like in 10 or 50
years?
 - e. How can it be made
into poor land?
 - f. How can it be kept
a good land?
 - g. Why do we want it to
be kept as a good crop
land?
3. Have children bring in
pictures of land areas
which have been harmed by
man & land which has
been kept good by man.
4. Have children give oral
reports on what they
observed on their trip.

Resource and Reference Materials
Publications:

Continued and Additional Suggested Learning

Audio-Visual:

Community:

Materials	Continued and Additional Suggested Learning Experiences
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C 12. Private ownership must be
O
N regarded as a stewardship and
C
E should not encroach upon or violate
P
T the individual right of others

Discipline Area Language Arts

Subject Dramatization

Problem Orientation Public Property

BEHAVIORAL OBJECTIVES

Cognitive: The learner will dramatize either how books should or should not be taken care of, and will list school property which should be cared for.
Affective: The student will adopt better ways for caring for school property.

Skills to be Learned
Dramatizing how books should or should not be used.
Learning to take turns in discussions.

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
 1. The children will look at the trees through the windows and then the teacher will list ways in which they are used stressing paper making which becomes their textbooks.
 2. Show filmstrip, How to Take Care of Books.
 3. Have children dramatize the correct or incorrect way to handle books.
 4. Discuss why school books should be cared for
 5. From discussion in number four, list other school property which should be cared for; children may want to tell how to care for each article listed.
 6. Discuss how our taking care of property now will help our future. (Include with this, that if we mar our books, will the first graders
- (cont.)

II. Out of Classroom

ownership must be

a stewardship and

encroach upon or violate

equal right of others.

Discipline Area Language Arts

Subject

Dramatization

Problem Orientation Public
Property

Grade 1

AL OBJECTIVES

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or should not
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he student
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how books
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take turns
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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

1. The children will look at the trees through the windows and then the teacher will list ways in which they are used stressing paper making which becomes their textbooks.
2. Show filmstrip, How to Take Care of Books.
3. Have children dramatize the correct or incorrect way to handle books.
4. Discuss why school books should be cared for
5. From discussion in number four, list other school property which should be cared for; children may want to tell how to care for each article listed.
6. Discuss how our taking care of property now will help our future.
(Include with this, that if we mar our books, will the first graders
(cont.)

II. Outside Resource and
Community Activities

Resource and Reference Materials
Publications:

Audio-Visual:

How to Take Care of Books,
filmstrip

Community:

Continued and Additional Suggest

I. (Cont)

- coming next year enjoy reading
- 7.If children are interested, &
other things (parks, roads) f
pay taxes.
- 8.Some children may want to tel
places where the public goes,
by taxes.

reference Materials

Continued and Additional Suggested Learning Experiences

I. (Cont)

coming next year enjoy reading as much as we have?

7.If children are interested, discuss where we use other things (parks, roads) for which our parents pay taxes.

8.Some children may want to tell about actions in places where the public goes, but are not paid for by taxes.

f Books,

PROJECT I-C-E

Episode Evaluation Form (Reproduce or duplicate as needed)

In commenting on each episode used in your class, you may wish to format. Please feel free to adapt it and add more pages. Let us know comments - negative and positive.

I. Behavioral Objectives

A. Cognitive:

B. Affective:

II. Skills Developed

III. Suggested Learning Experiences

A. In Class:

B. Outside & Community Activities

IV. Suggested Resource & Reference Materials (specific suggestions & comments)

~~duplicate~~

significant

Discipline Area Language Arts

ions over time.

Subject English

Problem Orientation Recycling Grade 11

LIVES

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
- A. Introduce the essentials of group discussion or planning
 - B. Introduce an environmental cause (glass disposal, paper disposal)
 - C. Make classroom committees responsible for:
 - 1. Writing handout sheets
 - 2. Writing newspaper articles
 - D. Check sources for ideas which could be used to increase community impact

- II. Outside Resource and Community Activities
- A. Carry on a bottle drive in the community following the distribution of publicity materials.
 - B. The signing on a pledge could be used to create community support.
 - C. Distribute pledge (petition) to stores, village board, etc. to show support for exclusion of non-returnable bottles.
 - D. Evaluate community reaction.
 - 1. Perceivable responses
 - 2. Any changes

sion

vity

Resource and Reference Materials

Continued and Additional Su

Publications:

The English Language

Ref. Group discussion and planning

Current issues of weeklys

Reader's Guide to Periodical

Literature

Speaking by Doing

National Textbook Co.

Skokie, Illinois

(Shows all different speech
formats)

Audio-Visual:

Community:

Continued and Additional Suggested Learning Experiences

C 12. Private ownership must be re-
O
N garded as a stewardship and should
C
E not encroach upon or violate
P
T the individual right of others.

Discipline Area Langu
Subject Engli
Problem Orientation L

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING
<p>Cognitive: In groups, members have an opportunity to listen, speak, take notes, and organize their thoughts. Smaller groups often allow more informal approach. Both chairmen, and finally the teacher, can quiz groups on their notes on organization of thoughts.</p> <p>Affective: At end of chairmen's reports, entire class might be tested by an essay question, on their beliefs regarding the concept as it appears in these writings. An open-ended discussion after final reports is another possibility.</p>	<p>I. Student-Centered in class activity</p> <p>A. Divide the class into groups. Each group (of 6-8 students) could read 3 of the 4 named works. Using a chairman as spokesman, each group could develop the concept as it exists in each of the three works read.</p> <p>B. Group meetings in which each member of each group should be encouraged to express orally, and in writing, his ideas about Keane's, Melville's, Clark's, and Updike's concepts of ownership.</p> <p>C. Conduct a chairman's meeting to sum up findings.</p> <p>D. Chairmen report to class on findings of various groups.</p>
<p><u>Skills to be Learned</u></p> <p>Listening Speaking Note-taking Organizing notes</p>	

ownership must be re-

tewardship and should

upon or violate

l right of others.

Discipline Area Language Arts

Subject English

Problem Orientation Literature

Grade 11

OBJECTIVES

groups, mem-
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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

- A. Divide the class into groups. Each group (of 6-8 students) could read 3 of the 4 named works. Using a chairman as spokesman, each group could develop the concept as it exists in each of the three works read.
- B. Group meetings in which each member of each group should be encouraged to express orally, and in writing, his ideas about Keane's, Melville's, Clark's, and Updike's concepts of ownership.
- C. Conduct a chairman's meeting to sum up findings.
- D. Chairmen report to class on findings of various groups.

II. Outside Resource and Community Activities

- A. Bring in speakers knowledgeable about literature to speak about different authors.

Resource and Reference Materials

Continued and Additional

Publications:

Pigeon Feathers and Other Stories

John Updike

Faucett Books, 1959.

The Field

J. B. Keane

Bartleby the Scrivener

Herman Melville

The Ox Bow Incident

Walter VanTilky Clark

Audio-Visual:

Collages by students, based on their mental pictures of Updike's stories and their relationship to the concept, that private ownership should not disturb others' rights.

Community:

Outside speakers with emphasis on literature, perhaps a local person who is a writer, a minister (specifically, one who might recognize Melville's Calvinistic overtones), or a different English teacher.

e Materials

her Stories

Continued and Additional Suggested Learning Experiences

based on
of Updike's
relationship to
private
disturb

emphasis
a local
, a
, one who
le's
, or a
her.

PROJECT I-C-E

Episode Evaluation Form (Reproduce or duplicate as needed)

In commenting on each episode used in your class, you may wish to use the following format. Please feel free to adapt it and add more pages. Let us know your comments - negative and positive.

I. Behavioral Objectives

A. Cognitive:

B. Affective:

II. Skills Developed

III. Suggested Learning Experiences

A. In-Class:

B. Outside & Community Activities:

IV. Suggested Resource & Reference Materials (specific suggestions & comments)

PROJECT I-C-E

Episode Evaluation Form (Reproduce or duplicate as needed)

each episode used in your class, you may wish to duplicate this suggested free to adapt it and add more pages. Let us know all your critiques and and positive.

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community Activities:

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Project I - C - E

INSTRUCTION - CURRICULUM - ENVIRONMENT

ED055919

A SUPPLEMENTARY PROGRAM FOR ENVIRONMENTAL EDUCATION

DISCIPLINE AREA Language Arts GRADE 12

Produced under Title III E.S.E.A.

PROJECT I-C-E

Serving Schools in CESA's 3-8-9

1927 Main Street

Green Bay, Wisconsin 54301

(414) 432-4338

Robert Warp

Robert Kell

George Howl

E INSTRUCTION - CURRICULUM - ENVIRONMENT

PROGRAM FOR ENVIRONMENTAL EDUCATION

Language Arts GRADE 12

Title III E.S.E.A.

in CESA's 3-8-9

sin 54301

Robert Warpinski, Director
Robert Kellner, Asst. Director
George Howlett, EE Specialist

PREFACE

If you wish to excite students about their environment, help of over a hundred teachers, year long meetings, a summer workshop ecologists, this guide means realistic, developed aid for you which have directed teachers in writing and editing this guide.

1. This guide is supplementary in nature and the episodes are ces--to plug into existing, logical course content.
2. Each page or episode offers suggestions. Since you know y to adapt, adopt, or use. By design, the range of suggestion mentation and usage are even wider. Many episodes are sel others can be changed in part or developed more keenly ove possibilities allow you to explore.
3. Now we urge that you try the episodes and suggested learning plan. The reasons are simple. No guide has all the answers unless viewed in the context of your classroom situation. give it a triple reading, check over the resources listed, prime your students, and seek help. The Project personnel knowledge page stand ready to aid your efforts. Feel
4. The Project Resource Materials Center serves all CESA 3, 8 private. We will send available materials pre-paid. Call visit. Phone 432-4338.
5. Check often the Project ICE Bibliography in your school li Center materials. Please offer suggestions, comments, or service may grow. Let's help each other.
6. Involve yourself with the guide by reacting to it with scr suggestions on the episode pages or use the attached evalu lected in late May next year and will be used in our revis reactions and suggestions--negative and positive. Please in the episodes may refer to specific, local community res cases, individual school districts and teachers will have stitutes. A list of terms pertinent to the episodes is be
7. Ecologists and other experts have simplified the issue--su Creation's beauty and complexity--often noted as the work and human energy to save. A year's work by a hundred of y gesture. Without you, their work will crumble, and so mig let us live to think, feel, and act in harmony with our wo

1. Cognitive means a measurable mental skill, ability, or
2. Affective refers to student attitudes, values, and feel
3. APWI means Acceptable Performance Will Include (labels
4. EPA - Environmental Problem Area

PREFACE

to excite students about their environment, help is ready. Thanks to the efforts of teachers, year long meetings, a summer workshop, university consultants and this guide means realistic, developed aid for you. Please note the following ideas selected teachers in writing and editing this guide. This is supplementary in nature and the episodes are designed--at appropriate instances--into existing, logical course content. Each episode offers suggestions. Since you know your students best, you decide what to adopt, or use. By design, the range of suggestions is wide; your chances for experimentation and usage are even wider. Many episodes are self-contained, others open-ended, still others can be changed in part or developed more keenly over a few weeks. These built-in features allow you to explore.

Remember that you try the episodes and suggested learning experiences but please pre-plan. Reasons are simple. No guide has all the answers and no curriculum will work in the context of your classroom situation. Thus, before trying an episode, do a triple reading, check over the resources listed, make mental and actual notes, discuss with students, and seek help. The Project personnel and teachers listed on the acknowledgment page stand ready to aid your efforts. Feel free to ask their help in pre-planning. The Resource Materials Center serves all CESA 3, 8, and 9 area schools--public and private--and will send available materials pre-paid. Call for any help, materials, or to reserve at 432-4338.

Check the Project ICE Bibliography in your school library for available Resource Materials. Please offer suggestions, comments, or advice--at any time--so that this guide can grow. Let's help each other.

Work yourself with the guide by reacting to it with scratch ideas, notes, and extended comments on the episode pages or use the attached evaluation format, which will be collected May next year and will be used in our revisions. We sincerely want your suggestions--negative and positive. Please note that some resources listed in the episodes may refer to specific, local community resources or conditions. In such cases, individual school districts and teachers will have to adopt local or available substitutes. A list of terms pertinent to the episodes is below.

Remember that other experts have simplified the issue--survival--yours, mine, our students', the beauty and complexity--often noted as the work of a genius--will take our genius and energy to save. A year's work by a hundred of your fellow teachers is a saving grace without you, their work will crumble, and so might we all--literally. Instead, let's try to think, feel, and act in harmony with our world.

Editorial Board

Intelligence means a measurable mental skill, ability, or process based on factual data. It refers to student attitudes, values, and feelings. Acceptable Performance Will Include (labels a cognitive or mental performance.) Environmental Problem Area

ACKNOWLEDGEMENTS: The following teachers and consultants part
of the Supplementary Environmental Education

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Gloria Morgan, Linsmeier Private
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C 1. Energy from the sun, the basic source
 O
 N of all energy, is converted through plant
 C
 E photosynthesis into a form all living
 P
 T things can use for life processes.

Discipline Area

Subject

Problem Orientation

BEHAVIORAL OBJECTIVES

Cognitive: The student will produce a film with voice and/or music sound track which illustrates that the sun is the source of all energy.
Affective: Using creative portrayal of the sun's effect the student will develop a positive attitude and understanding of the sun's effects.

Skills to be Learned

Film making
 Narration of film
 Ability to discover and capture on film, concrete manifestations of ecological concepts.

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
 1. Instruction in use of "Super 8" camera.
 2. Instruction in use of sound with "Super 8" equipment.
 3. The "production team" is organized and instructed by teacher. The production team will discuss the concept and come up with ideas for a scenario dealing with how the sun affects life around them.
 4. Each "production team" develops a "scenario outline" geared to the concept of the sun.
 5. Each "scenario outline" is analyzed and revised, first by student groups, finally by the teacher.
 6. A "mock" take is made by one team as other team and instructor observe.
 7. "Mock take" is criticized and revised.
 8. "Shooting."
 9. Editing of film.
 10. Adding sound.
(cont.)

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orm all living
processes.

Discipline Area

Language Arts

Subject

English

Problem Orientation

Energy

Grade 12

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. Instruction in use of "Super 8" camera.
 2. Instruction in use of sound with "Super 8" equipment.
 3. The "production team" is organized and instructed by teacher. The production team will discuss the concept and come up with ideas for a scenario dealing with how the sun affects life around them.
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 6. A "mock" take is made by one team as other team and instructor observe.
 7. "Mock take" is criticized and revised.
 8. "Shooting."
 9. Editing of film.
 10. Adding sound.
- (cont.)

II. Outside Resource and Community Activities

Resource and Reference Materials

Publications:

Kodak's "How to Make a Movie"
Magazine - Media and Methods
"Fifteen One-Act Plays", Gore
Vidal

"Famous T.V. Plays", Gore Vidal.

Audio-Visual:

"Super 8" camera
"Super 8" projector
Film
Projection Screen
Sound equipment
Editing equipment

Community:

Local theatre group or drama
society.

Continued and Additional Suggested Learning

I. (cont.)

11. Viewing.

12. Class evaluation of production and
therein.

Continued and Additional Suggested Learning Experiences

I. (cont.)

11. Viewing.

12. Class evaluation of production and the ideas contained therein.

C 2. All living organisms interact among
 O themselves and their environment,
 N
 C forming an intricate unit called
 E
 P an ecosystem.
 T

Discipline Area L

Subject E

Problem Orientation

ESEA Title III - 59-70-0135-1 Project I-C-E

BEHAVIORAL OBJECTIVES

Cognitive: Given the raw data, the student is to discover the thesis inherent in that data, and he is to state that thesis in sentence form, and he is to support that thesis in a formal essay.
Affective: To experience the process of discovery, and from this experience, begin to value the ability to synthesize. In short, each student should be able, not only to analyze data, but also to use (synthesize) the data in an organized manner.

Skills to be Learned
 Analysis of data
 Statement of thesis
 Composition of Supporting Evidence in formal style

SUGGESTED LEARNING

- I. Student Centered in class activity
 - A. Present "raw" data (See attached sheet).
 - B. Students are to individually analyze the raw data.
 - C. Students are to state (in a single sentence) the thesis which they have derived from their analysis of the raw data.
 - D. Students are to write a brief formal essay in which they present the thinking which in their analysis of the raw data, led to the conclusion (thesis) they individually formulated.
 - E. Class discussion of the various analyses of the raw data.
 - F. Suggestions for Raw Data
 1. Wolf population on Isle Royale
 2. Deer herds
 3. Trees
 4. Other items of the student's choice

ing organisms interact among

and their environment,

intricate unit called

em.

Discipline Area Language Arts

Subject English

Problem Orientation Pollution Grade 12

REAL OBJECTIVES

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data, and he is
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of discovery,
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analyze data,
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Learned
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f thesis
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SUGGESTED LEARNING EXPERIENCES

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 - B. Students are to individually analyze the raw data.
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(in a single sentence) the thesis which they have derived from their analysis of the raw data.
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 - E. Class discussion of the various analyses of the raw data.
 - F. Suggestions for Raw Data
 - 1. Wolf population on Isle Royale
 - 2. Deer herds
 - 3. Trees
 - 4. Other items of the student's choice

II. Outside Resource and Community Activities

SEE Second Sheet
for raw data

Resource and Reference Materials
Publications:

Invention and Topics: Or Where to Look for Something to Say,
 by Scott Elledge, p. 11.

(Published by Commission on English of the College Entrance Examination Board)

Wisconsin Dept. of Natural Resources

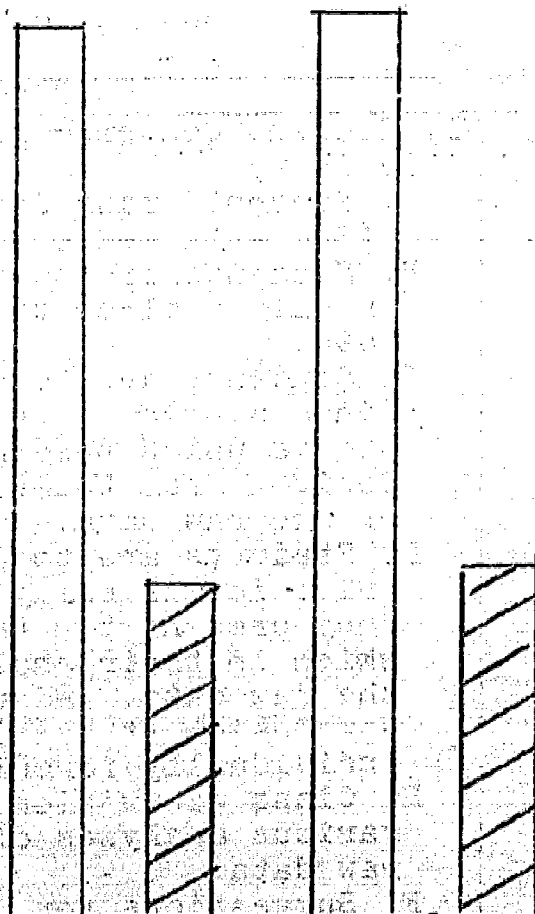
Michigan Conservation Dept.

Audio-Visual:

Community:

Students each seek raw data to present to class members.

"COMMON PEPPERED MOTH" RURAL AREA

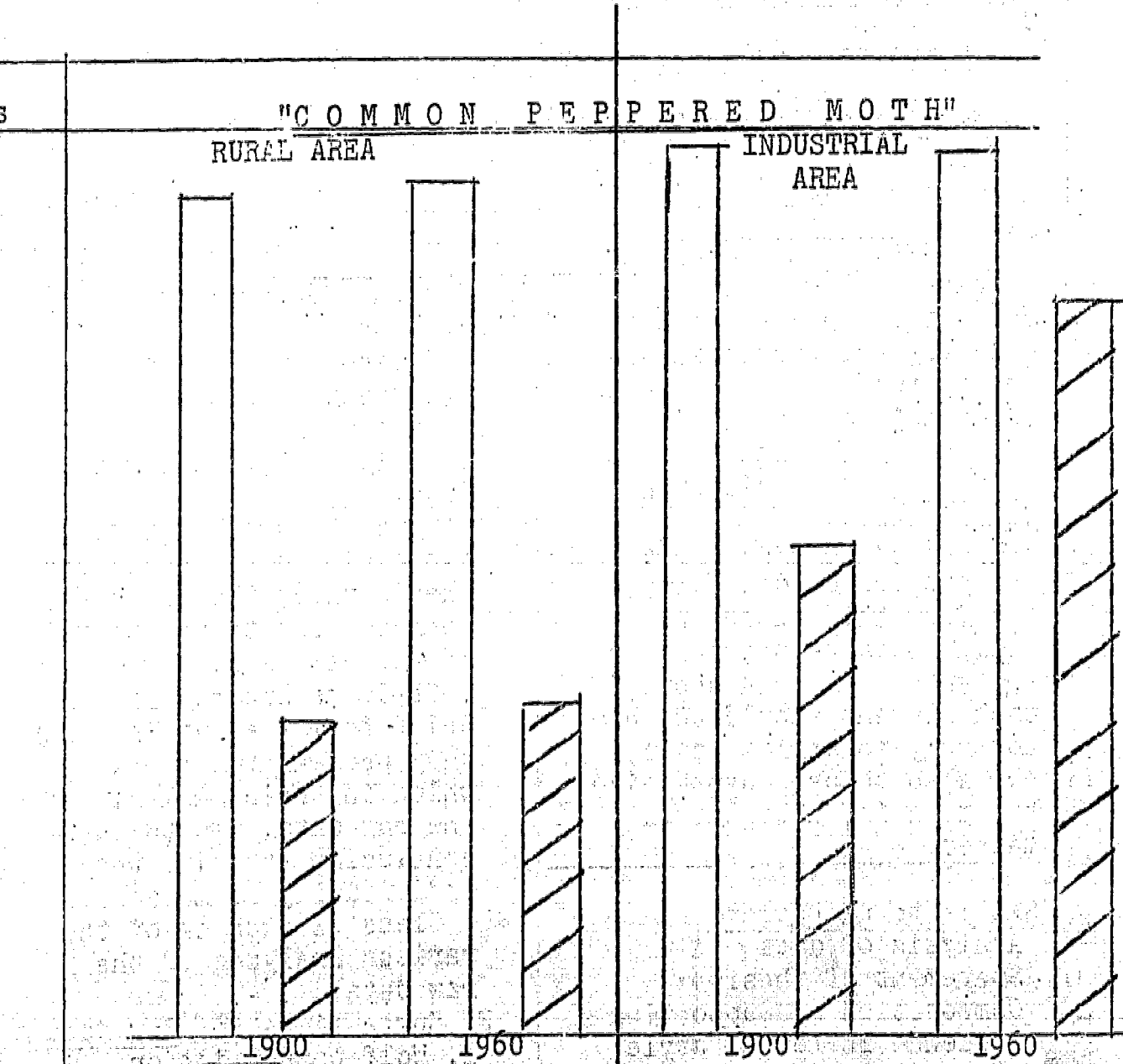


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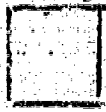
BLACK MUTANT STRAIN



This graph is to be prepared with this direction: "write a statement explaining i.e. account for the data"



COMMON
PEPPERED
MOTH



BLACK
MUTANT
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This graph is to be presented to the students with this direction: "Analyze this graph, and write a statement explaining what it shows, i.e. account for the differences."

C 3. Environmental factors are limiting
 O
 N on the numbers of organisms living
 C
 E within their influence, thus, each
 P
 T environment has a carrying capacity.

Discipline Area Language

Subject English

Problem Orientation A

BEHAVIORAL OBJECTIVES

Cognitive: In modern drama, the student will be able to isolate actions of characters which are influenced by the area in which they live through their interviews and discussion of the problem.
Affective: By researching and comparing the attitudes of people about city life, the student will find that man, through managing and mis-managing his environment, can indirectly alter his attitudes and his life style by advocating good management techniques.

Skills to be Learned

Interpretive reading skills
 Comparisons of actions in relationship to an ecological problem
 Interviewing skills

SUGGESTED LEARNING

- I. Student-Centered in class activity
 - A. The class will orally read the play Street Scene.
 - B. After reading, the class will discuss how the carrying capacity influenced the attitudes and actions of the characters.
 - C. Discuss how one person in such a close situation can influence the life of another.

ESEA Title III - 59-70-0135-1 Project I-C-E

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mental factors are limiting

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influence, thus, each

has a carrying capacity.

Discipline Area Language Arts

Subject English-Drama

Problem Orientation Attitudes Grade 12

OBJECTIVES

modern drama, all be able to s of characters uenced by the they live interviews and the problem. researching and attitudes of city life, the ind that man, ng and mis- nvironment, alter his his life style good manage- s.

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skills

SUGGESTED LEARNING EXPERIENCES

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- A. The class will orally read the play Street Scene.
 - B. After reading, the class will discuss how the carrying capacity influenced the attitudes and actions of the characters.
 - C. Discuss how one person in such a close situation can influence the life of another.

- II. Outside Resource and Community Activities
- A. Interview people who have lived in a large city regarding their attitudes on city life.

Resource and Reference Materials

Continued and Additional Sugge

Publications:

Street Scene - Elmer Rice

Time of Your Life -

William Saroyan

Washington Square Paperback,
publisher

Audio-Visual:

Community:

Members of the Community

Materials

Continued and Additional Suggested Learning Experiences

ce

back,

ESEA Title III - 59-70-0135-1 Project I-C-E

C 4. An adequate supply of pure
O
N water is essential for life.
C
E
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T

Discipline Area Lan

Subject Eng

Problem Orientation

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING

Cognitive: To organize a newspaper campaign to draw attention to the need for solutions to problems drawing from an inadequate water treatment center.
Affective: By getting the student actively involved in a civic problem that is immediate & relevant, he will understand the importance of pure water to his life as he researches the history of the city plant & discusses his findings.

- I. Student-Centered in class activity
A. Research
1. History of the current city plant
2. Report the standards set for the city which the student resides.
3. Report present conditions to write a comparison.
4. Write the newspaper articles to support your campaign.

Skills to be Learned

Ability to analyze data, to establish the crux of the matter, to effectively report findings

supply of pure

ial for life.

Discipline Area Language Arts

Subject English

Problem Orientation Treatment plant Grade 12

OBJECTIVES

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

A. Research

1. History of the current city plant
2. Report the standards set for the city which the student resides.
3. Report present conditions to write a comparison.
4. Write the newspaper articles to support your campaign.

II. Outside Resource and Community Activities

- A. Interview city officials and residents to discuss the situation.
- B. Take findings to the class with an oral report or set up a panel discussion.
- C. Tour the processing plant to get a first hand look. Write a report of your personal reaction.
- D. Tour water treatment center.

Resource and Reference Materials
Publications:

The Sea Around Us, R. Carson
The Master Builder, Ibsen

Continued and Additional Suggeste

Audio-Visual:

Community:

Resource people in the
community

Water plant

City engineer

Doctors & health officials

C 5. An adequate supply of clean air is
 O
 N essential because most organisms Discipline Area L
 C
 E depend on oxygen, through respiration, Subject E
 P
 T to release the energy in their food. Problem Orientation

ESEA Title III - 59-70-0135-1 Project I C E	BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING ACTIVITIES
	<p>Cognitive: Using the media of editorial writing the student will be able to construct a sound logical editorial based on a community problem.</p> <p>Affective: The student will demonstrate his understanding that clean air is essential for life by writing a letter to the editor urging the curbing an air pollution source.</p> <p><u>Skills to be Learned</u></p> <p>Determining community problems</p> <p>Writing of editorials</p> <p>Evaluation of editorials</p>	<p>I. Student-Centered in class activity</p> <ol style="list-style-type: none"> 1. Present two pictures-one with abundant clean air; the other with polluted air. Which would be more conducive to life? Why? 2. What problems are created by lack of clean air? - Discuss 3. Survey community for examples of air pollution. Research examples for reasons why air pollution is allowed. 4. Discuss in what ways this example creates other problems and why is it necessary in community to allow them to pollute. 5. Write editorials or "letter to the editor" urging the curbing sources of air pollution in community. 6. Select the best paper and send it to the local newspaper.

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use most organisms

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Discipline Area Language Arts

Subject

English

Problem Orientation Clean Air

Grade 12

OBJECTIVES

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

1. Present two pictures-one
with abundant clean air; the
other with polluted air. Which
would be more conducive to
life? Why?

2. What problems are created by
lack of clean air? - Discuss.

3. Survey community for example
of air pollution. Research
examples for reasons why air
pollution is allowed.

4. Discuss in what ways this one
example creates other problems
and why is it necessary in this
community to allow them to
pollute.

5. Write editorials or "letters to
the editor" urging the curbing of
sources of air pollution in the
community.

6. Select the best paper and submit
it to the local newspaper.

II. Outside Resource and
Community Activities

Resource and Reference Materials

Publications:

Newspaper for examples of editorials.

Audio-Visual:

SMOG: The Air Pollution Game

Environmental Pollution...Our

World in Crisis - Ward's film-strip

Community:

Editorial writer of local newspaper.

Continued and Additional Suggeste

Materials

Continued and Additional Suggested Learning Experience

of

a Game
...Our
s film-

1 news-

C 6. Natural resources are not equally

O distributed over the earth or over

C time and greatly affect the geographic

P conditions and quality of life.

Discipline Area _____ I

Subject _____ E

Problem Orientation Re _____

BEHAVIORAL OBJECTIVES

Cognitive: Students will be able to take notes, to view things from others point of view, through listening to authorities on given subjects and thru their discussion.

Affective: Through discussion, students will become aware of different life styles & how natural resources shape these life styles by participating in an open-ended discussion involving every student.

Skills to be Learned

Notetaking
Listening
Discussion techniques
Role-playing - seeing things from various points of view

SUGGESTED LEARNING

I. Student-Centered in class activity

1. Student discussion in which some students (or all) might role-play Indian & white attitudes. Discussion would center on apparent differences in values systems of Indians & whites as illustrated in speakers' views, as seen on field trip.

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Discipline Area

Language Arts

Subject

English

Problem Orientation Resource Usage Grade

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

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II. Outside Resource and Community Activities

1. Speaker on Indians' use of land & students ask questions, take notes.
2. Speaker on white man's use of land - students ask questions, take notes.
3. Field trip, together or individually, to "areas" (in nature) managed, basically by whites; to another area managed basically by Indians.

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g
oints

Resource and Reference Materials
Publications:

The Next Hundred Years by Harrison
Brown, Viking Press, 1957.

Audio-Visual:

Student-created collages of
various people's use or
misuse of land

Pictures or slides taken on
field trip

Records on this area or problem

Community:

Speaker - Indian leaders,
industry spokesman, DNR
spokesman

Historical records - local
library, including pictures
of given areas, then & now.

Continued and Additional Suggested

Materials

Continued and Additional Suggested Learning Experiences

Harrison
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C 7. Factors such as facilitating transportation,
O
N economic conditions, population growth, Discipline Area Langu
C
E and increased leisure time have a great Subject Engli
P
T influence on changes in land use and Problem Orientation Le
centers of population density.

BEHAVIORAL OBJECTIVES

Cognitive: Students will work on their reading skills for characterization, theme... Students are afforded the chance to work on writing skills-organization, argument, synthesis, conclusion, etc. Students work at listening carefully-taking notes. Check them against a playback of the speaker's talk.

Affective: Students think about influences of mass society on their lives. These influences-e.g. of mass media-might be the subject. Students become more sophisticated concerning life styles especially if they are enabled to see middle, upper & lower class of an essay.

Skills to be Learned

Reading for content, speed
Writing-organization
Listening-notetaking
Standards in dress, politics

SUGGESTED LEARNING

- I. Student-Centered in class activity
 - A. Classroom
 1. Read novels pertaining to topics being discussed
 2. Mock trial in which one or more students might be held & accused of some type of fundamental "heresy". e.g. The family is a worthless unit or the family is a very worth while institution.
 3. 2 or 3 students do an opinion poll on some unsettling idea & then report to class.
 4. Debate on "Whither mass society?"
 5. Theme assignment - topic "How close are we to 1984"
 6. Panel on "Creative Use of Leisure Time."

such as facilitating transportation,

ditions, population growth, Discipline Area Language Arts

ed leisure time have a great Subject

English

a changes in land use and Problem Orientation Leisure Time Grade 12
population density.

LEARNING OBJECTIVES

SUGGESTED LEARNING EXPERIENCES

Students will
reading skills
ization, theme...
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on writing
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- I. Student-Centered in class activity
A. Classroom
1. Read novels pertaining to topics being discussed.
 2. Mock trial in which one or more students might be held & accused of some type of fundamental "heresy". e.g. The family is a worthless unit or the family is a very worthwhile institution.
 3. 2 or 3 students do an opinion poll on some unsettling idea & then report to class.
 4. Debate on "Whither mass society?"
 5. Theme assignment - topic: "How close are we to 1984?"
 6. Panel on "Creative Use of Leisure Time."

- II. Outside Resource and Community Activities
A. Outside classroom
1. Students could interview various people by asking them specific questions such as:
a. Do you feel increased pressures in your life to conform? If so, why?
b. Do you feel people are prepared (formally or otherwise) to use increased leisure time creatively?

earned
content, speed
ization
etaking
dress, politics

Resource and Reference Materials

Continued and Additional Suggeste

Publications:

1984, George Orvell

Brave New World by Huxley

Walden II, B. F. Skinner

Audio-Visual:

Collages showing leisure time activities. Some emphasis might be put on "quality" of activities.

Film:

1984

Community:

Outside speakers:

Minister might talk on the church as an establishment tool

Leader in industry could speak on shortened work week, attendant problems

Materials

Continued and Additional Suggested Learning Experiences

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time
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activities.

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ent tool
speak on
tendant

C 8. Cultural, economic, social, and
O political factors determine status
N of man's values and attitudes
C toward his environment.

Discipline Area

Subject

Problem Orientation

BEHAVIORAL OBJECTIVES

Cognitive: Students can work on their reading skills analysis of social factors involved, can look at their writing techniques & work at verbalizing their social patterns' influences on people's lives.

Affective: Students should become aware that various sociological factors have influenced others & will influence their lives. Students might be given a choice of essay topics to write on.

Skills to be Learned

Reading

Writing

Notetaking

Organizing material

Listening

SUGGESTED LEARNING

I. Student-Centered in class activity

1. Read one or more novels noted in publications. Entire class could read or work or class could be divided into groups responsible for discussing each novel.

a. Theme on topic such as slavery, physical or intellectual.

b. Have a panel or debate theme of the novel.

2. Dramatization of given scenes from novel e.g. death scene in Grapes of Wrath, or opening scene replete with sleepy husband and wife in bathroom in Babbitt.

ultural, economic, social, and
al factors determine status
s values and attitudes
this environment.

Discipline Area Language Arts
 Subject English
Social
 Problem Orientation Status Grade 12

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
<p> : Students can their reading skills of social factors can look at their techniques & work izing their social influences on lives. : Students should are that various cal factors have d others & will their lives. ight be given a essay topics to </p>	<p> I. Student-Centered in class activity 1. Read one or more novels noted in publications. Entire class could read one work or class could be divided into groups respons- ible for discussing each novel. a. Theme on topic such as: slavery, physical or intel- lectual. b. Have a panel or debate on theme of the novel. 2. Dramatization of given scenes from novel e.g. death scene in <u>Grapes of</u> <u>Wrath</u>, or opening scene replete with sleepy husband and wife in bathroom in <u>Babbitt</u>. </p>	<p> II. Outside Resource and Community Activities </p>
<p> <u>be Learned</u> g g material g </p>		

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Continued and Additional Suggested Learning Experiences

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C 9. Man has the ability to manage,

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Discipline Area La

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Problem Orientation

BEHAVIORAL OBJECTIVES

SUGGESTED LEARN

Cognitive: Given the position papers the student is to declare himself for either position A or B. Based on his research of his stand or position, the student is to defend his stand verbally &/or in writing to other students in the class.

Affective: Students should be able, through listening to others & through diligent research, to realize that the quality of his environment is something in which he must involve himself. The students' notes taken during discussion could be collected & evaluated by the instructor.

Skills to be Learned

Literary analysis
Researching an issue
Defending a position,
verbally or in writing
Note taking

I. Student-Centered in class activity

A. Classroom

1. Two brief papers are presented by instructor
Paper A - takes position that to solve technological dilemma is to carry out further technological development. e.g. Buchman's "Design Strategy" approach. Paper B - preposition of anti-technological individuals or groups. Cummings poems or Reich's "The Greening of America"
2. Students are asked to take a stand for position A or B. Students should research their stand. (The number of days used for research optional.)
3. Students are either to debate (formally or informally) or to write their position in essay form.

ESBA Title III - 59-70-0135-1 Project I-C-E

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Discipline Area Language Arts

Subject English

Problem Orientation Land Use Grade 12

RAL OBJECTIVES

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

A. Classroom

1. Two brief papers are presented by instructor. Paper A - takes position that to solve technological dilemma is to carry out further technological development. e.g. Buchminster Fuller's "Design Strategy" approach. Paper B - present position of anti-technological individuals or groups. e.g. Cummings poems or Reich's "The Greening of America".
2. Students are asked to take a stand for position A or B. Students should research their stand. (The number of days used for research is optional.)
3. Students are either to debate (formally or informally) or to write their positions in essay form.

II. Outside Resource and Community Activities

- ###### A. Invite a factory owner, conservation agent or a person from DNR to give a talk to class.

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Discipline Area Language Arts

Subject English

Problem Orientation Land Use Grade 12

GENERAL OBJECTIVES

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SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
- A. Classroom
1. Two brief papers are presented by instructor. Paper A - takes position that to solve technological dilemma is to carry out further technological development. e.g. Buchminster Fuller's "Design Strategy" approach. Paper B - present position of anti-technological individuals or groups. e.g. Cummings poems or Reich's "The Greening of America".
 2. Students are asked to take a stand for position A or B. Students should research their stand. (The number of days used for research is optional.)
 3. Students are either to debate (formally or informally) or to write their positions in essay form.

- II. Outside Resource and Community Activities
- A. Invite a factory owner, conservation agent or a person from DNR to give a talk to class.

Resource and Reference Materials	Continued and Additional Suggeste
<p><u>Publications:</u></p> <p><u>Utopia or Oblivion</u>, Buchminster Fuller</p> <p><u>Progress is a Comfortable Disease</u>, & other poems by Cummings</p> <p><u>The Greening of America</u>, C. Reich</p> <p><u>What Good are Pelicans For</u>, J. Schrank, <u>Media & Methods</u>, May, 1970, p. 32</p> <p><u>Those Good New Days</u>, G. Seaborg, <u>Saturday Review</u>, March 6, 1971, p. 52</p> <p><u>Audio-Visual:</u></p> <p>Magazines & news pictures</p> <p>Films (available form I.C.E. office)</p> <p>"Later...Perhaps"</p> <p>"The Girls"</p> <p><u>Community:</u></p> <p>FIR</p> <p>Factory owner</p> <p>Conservationist</p>	

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Continued and Additional Suggested Learning Experiences

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C 10. Short-term economic gains may

O produce long-term environmental

C losses.

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Discipline: Area

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Problem Orientation

BEHAVIORAL OBJECTIVES

Cognitive: Small groups' work should aid students in developing tools of discussion, listening, note taking, and analyzing.

Affective: Students should become more aware of the effects (both good & bad) of our using our environment for economic gain by taking an active part in a symposium discussion centered around the biologic, social, economic & ethical views of environmental losses.

Skills to be Learned

Listening
Note taking
Analyzing

SUGGESTED LEARNING ACTIVITIES

I. Student-Centered in class activity

A. Classroom

1. Class could be divided into small groups, each group to deal with one basic reading of the mentioned.

a. Group 1 - the biologic view. In dramatization

use of collages, panel speakers, this group could base its work on Our Plundered Planet

b. Groups 2 & 3 - the two groups could, through dramatization, panel speakers, deal with effects of human growth (short-sightedness) on individuals (& groups) social & economic problems. Group 2 use The Octopus & Group 3 use The Jungle.

c. Group 4 - probably if held till last, particularly because of Walden's more optimistic tone (in relation to the first) used by the first. This group could use

economic gains may

term environmental

Discipline Area Language Arts

Subject English

Problem Orientation Land Use Grade 12

OBJECTIVES

All groups' students pools of tending, d
dents should re of the ood & bad) r environ- ic gain by e part in cussion l the biologic, c & ethical onmental losses.

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

A. Classroom

1. Class could be divided into small groups, each group to deal with one basic reading of the 4 mentioned.
 - a. Group 1 - the biologic view. In dramatization use of collages, panels, speakers, this group could base its work on Our Plundered Planet.
 - b. Groups 2 & 3 - these two groups could, thru dramatization, panels, speakers, deal with the effects of human greed (short-sightedness) on individuals (& groups) & social & economic problems. Group 2 use The Octopus & Group 3 use The Jungle.
 - c. Group 4 - probably best if held till last, particularly because of Walden's more optimistic tone (in relation to texts used by the first 3 groups). This group could use (cont.)

II. Outside Resource and Community Activities

Resource and Reference Materials	Continued and Additional
<u>Publications:</u> <u>Walden</u> , Thoreau <u>Our Plundered Planet</u> , F. Osborn 1948, Little, Brown & Co. <u>The Octopus</u> , F. Norris <u>The Jungle</u> , U. Sinclair	I. (cont.) selections from <u>Walden</u> learns to live with collages, panels and
<u>Audio-Visual:</u> Students can make collages, slides; films on our meat packing industry (& others) are available	
<u>Community:</u> Speakers DNR Local conservationist's group Paper mill manufacturer Sociologist	

Reference Materials

au
Planet, F. Osborn
, Brown & Co.
F. Norris
. Sinclair

make collages,
s on our meat
stry (& others)
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vationist's group
anufacturer

Continued and Additional Suggested Learning Experiences

I. (cont.)

selections from Walden to show what happens when man learns to live within the structure of nature. Use collages, panels and readings.

C 11. Individual acts, duplicated
 O
 N or compounded, produce significant
 C
 E environmental alterations over time.
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Discipline Area
 Subject
 Problem Orientation

BEHAVIORAL OBJECTIVES

Cognitive: Students will work on their reading skills: seeing characterization, recognizing themes, main ideas. Students can work on their writing, specifically, they might try a descriptive passage (or text) in which they try to show their reader a lovely setting in nature, or a desolate industrial area.
Affective: Students should see the strong relationships between individual's actions and our emotional-psychic and physical environment. Specifically, students might write a number of short papers in which they can portray their own attitudes toward both psychic and/or physical environmental change.

SUGGESTED LEARNING ACTIVITIES

- I. Student-Centered in class activity
 - A. Panels - on various books.
 - B. A symposium - in which the participants try to establish what (if any) relationships exist between the inner environment (psychic) and the exterior (physical) environment.
 - C. Readings followed by films.

Skills to be Learned

Close reading
 Writing with careful structure

1 acts, duplicated
 , produce significant
 alterations over time.

Discipline Area Language Arts

Subject English

Problem Orientation Aesthetic Grade 12

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
<p>ents will eading skills: rization, mes, main can work on specifically, a descriptive t) in which w their setting in solate . ents should relationships ual's actions al-psyhic vironment. tudents might of short they can wn attitudes chic and/or nmental</p>	<p>I. Student-Centered in class activity A. Panels - on various books. B. A symposium - in which the participants try to establish what (if any) relationships exist between the inner environment (psychic) and the exterior (physical) environment. C. Readings followed by films.</p>	<p>II. Outside Resource and Community Activities A. Outside speakers - an artist, a politician could sit on panels with students</p>
<p>arned areful</p>		

Resource and Reference Materials

Publications:

-The Picture of Dorian Gray

Oscar Wilde

Dell, Signet

-All the King's Men

Robert P. Warren

-Population Bomb

Paul Erhlich

-The "Legend Lake" controversy radio, newspaper editorials

- "Under the Lion's Paw" (and other stories)

Hamlin Garland

-The Greening of America

C. Reich

Audio-Visual:

-Film: All the King's Men

-Film: The Picture of Dorian Gray

Community:

-Speakers from D.N.R., political parties (representatives)

-Demonstration by local artist (commercial) of individuals'

reactions to changed psychic or
physical environment.

Continued and Additional Suggested

Materials

Continued and Additional Suggested Learning Experiences

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 E should not encroach upon or violate
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BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING ACTIVITIES
<p><u>Cognitive:</u> The student will voice his own philosophy on the question of man's relationship to the earth - Is man owner or steward?</p> <p><u>Affective:</u> Students should become more aware of others & their own attitudes toward fundamental ecological issues. These new born attitudes toward stewardship, should be evaluated by having a group of 3 or 4 students work out a questionnaire with the aim of measuring the class's attitudes.</p>	<p>I. Student-Centered in class activity</p> <p>A. Classroom</p> <ol style="list-style-type: none"> 1. Read <u>The Bear</u> by Wm. Faulkner, 5 parts. 2. Analyze parts 1, 2, 3, & emphasize on themes of "initiation into manhood" & "stewardship of land". 3. Critical reading of part 4 with emphasis on mixed up value systems, rape of land vs. urge to use land wisely 4. Each student should either <ol style="list-style-type: none"> a. Get on a panel which discuss one of the basic themes in the book. b. Present a paper on some issue as McCaslin's view of the land. c. Give a talk on some issue such as, "The changing view of the land from stewardship (Boon 1, 2, 3) to greed (Boon part 5). 5. Work out a questionnaire the aim of measuring the class's attitudes and then have a class discussion.
<p><u>Skills to be Learned</u></p> <p>Reading difficult material</p> <p>Analysis of parts & whole</p> <p>Verbal &/or written presentation of one's individual "position" on a fundamental issue</p>	

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Discipline Area Language Arts
 Subject English
 Problem Orientation Stewardship Grade 12

OBJECTIVES
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SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
 A. Classroom
1. Read The Bear by Wm. Faulkner, 5 parts.
 2. Analyze parts 1, 2, 3, & emphasize on themes of "initiation into manhood" & "stewardship of land".
 3. Critical reading of part 4 with emphasis on mixed up value systems, rape of land vs. urge to use land wisely
 4. Each student should either:
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 - b. Present a paper on some issue as McCaslins view of the land.
 - c. Give a talk on some issue such as, "The changing view of the land, from stewardship (Boon-parts 1, 2, 3) to greed (Boon-part 5).
 5. Work out a questionnaire with the aim of measuring the class's attitudes and then have a class discussion.

II. Outside Resource and Community Activities

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Resource and Reference Materials	Continued and Additional Suggest
<p><u>Publications:</u></p> <p><u>Faulkner</u> edited by Malcolm Cowley, Viking pub., (Fine introduction) <u>Six Great Modern Short Novels</u>, Dell pub.</p> <p><u>Audio-Visual:</u></p> <p>Students could make slides, collages showing our use or misuse of our land</p> <p><u>The Gifts</u>, U.S. Dept. of Interior Federal Water Quality Association Office of Public Instruction</p> <p><u>Community:</u></p> <p>Speaker from DNR Local farmer Interested citizen Conservationis group (All can give talks on use of land)</p>	

Reference Materials

Malcolm Cowley,
(introduction)
Short Novels,

slides, collages
misuse of our

C. of Interior
ty Association
struction

on use of land)

Continued and Additional Suggested Learning Experiences

PROJECT I-C-E

Episode Evaluation Form (Reproduce or duplicate as needed)

In commenting on each episode used in your class, you may wish to use the following format. Please feel free to adapt it and add more pages. Let us hear your comments - negative and positive.

I. Behavioral Objectives

A. Cognitive:

B. Affective:

II. Skills Developed

III. Suggested Learning Experiences

A. In-Class:

B. Outside & Community Activities:

IV. Suggested Resource & Reference Materials (specific suggestions & comments)

PROJECT I-C-E

Episode Evaluation Form (Reproduce or duplicate as needed)

on each episode used in your class, you may wish to duplicate this suggested
feel free to adapt it and add more pages. Let us know all your critiques and
ive and positive.

Objectives
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PROJECT I-C-E

Episode Evaluation Form (Reproduce or duplicate as needed)

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free to adapt it and add more pages. Let us know all your critiques and
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Project I - C - E

INSTRUCTION - CURRICULUM - ENVIRONMENT

ED055919

A SUPPLEMENTARY PROGRAM FOR ENVIRONMENTAL EDUCATION

DISCIPLINE AREA Language Arts Grade 2

Produced under Title III E.S.E.A.

PROJECT I-C-E

Serving Schools in CESA's 3-8-9

1927 Main Street

Green Bay, Wisconsin 54301

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Robert War

Robert Kel

George How

INSTRUCTION - CURRICULUM - ENVIRONMENT

M FOR ENVIRONMENTAL EDUCATION

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Robert Warpinski, Director
Robert Kellner, Asst. Director
George Howlett, EE Specialist

PREFACE

If you wish to excite students about their environment, help is of over a hundred teachers, year long meetings, a summer workshop, ecologists, this guide means realistic, developed aid for you. Ple which have directed teachers in writing and editing this guide.

1. This guide is supplementary in nature and the episodes are desi ces--to plug into existing, logical course content.
2. Each page or episode offers suggestions. Since you know your st to adapt, adopt, or use. By design, the range of suggestions is mentation and usage are even wider. Many episodes are self-cont others can be changed in part or developed more keenly over a f possibilities allow you to explore.
3. Now we urge that you try the episodes and suggested learning ex plan. The reasons are simple. No guide has all the answers and unless viewed in the context of your classroom situation. Thus, give it a triple reading, check over the resources listed, make prime your students, and seek help. The Project personnel and t knowledge page stand ready to aid your efforts. Feel free to
4. The Project Resource Materials Center serves all CESA 3, 8, and private. We will send available materials pre-paid. Call for an visit. Phone 432-4338.
5. Check often the Project ICE Bibliography in your school library Center materials. Please offer suggestions, comments, or advice service may grow. Let's help each other.
6. Involve yourself with the guide by reacting to it with scratch suggestions on the episode pages or use the attached evaluation lected in late May next year and will be used in our revisions. reactions and suggestions--negative and positive. Please note t in the episodes may refer to specific, local community resource cases, individual school districts and teachers will have to ad stitutes. A list of terms pertinent to the episodes is below.
7. Ecologists and other experts have simplified the issue--surviva Creation's beauty and complexity--often noted as the work of a and human energy to save. A year's work by a hundred of your fe gesture. Without you, their work will crumble, and so might we let us live to think, feel, and act in harmony with our world.

Editor

1. Cognitive means a measurable mental skill, ability, or proce
2. Affective refers to student attitudes, values, and feelings.
3. APWI means Acceptable Performance Will Include (labels a cog
4. EPA - Environmental Problem Area

PREFACE

te students about their environment, help is ready. Thanks to the efforts
chers, year long meetings, a summer workshop, university consultants and
e means realistic, developed aid for you. Please note the following ideas
eachers in writing and editing this guide.

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existing, logical course content.

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e are even wider. Many episodes are self-contained, others open-ended, still
ged in part or developed more keenly over a few weeks. These built-in
w you to explore.

ou try the episodes and suggested learning experiences but please pre-
are simple. No guide has all the answers and no curriculum will work
he context of your classroom situation. Thus, before trying an episode,
eading, check over the resources listed, make mental and actual notes,
s, and seek help. The Project personnel and teachers listed on the ack-
stand ready to aid your efforts. Feel free to ask their help in pre-planning.
ce Materials Center serves all CESA 3, 8, and 9 area schools--public and
end available materials pre-paid. Call for any help, materials, or to
338.

oject ICE Bibliography in your school library for available Resource
Please offer suggestions, comments, or advice--at any time--so that this
Let's help each other.

ith the guide by reacting to it with scratch ideas, notes, and extended
episode pages or use the attached evaluation format, which will be col-
next year and will be used in our revisions. We sincerely want your
estions--negative and positive. Please note that some resources listed
y refer to specific, local community resources or conditions. In such
school districts and teachers will have to adopt local or available sub-
f terms pertinent to the episodes is below.

er experts have simplified the issue--survival--yours, mine, our students,
and complexity--often noted as the work of a genius--will take our genius
o save. A year's work by a hundred of your fellow teachers is a saving
ou, their work will crumble, and so might we all--literally. Instead,
nk, feel, and act in harmony with our world.

Editorial Board

a measurable mental skill, ability, or process based on factual data.
s to student attitudes, values, and feelings.

ptable Performance Will Include (labels a cognitive or mental performance.)
ntal Problem Area

ACKNOWLEDGEMENTS: The following teachers and consultants participated in the development of the Supplementary Environmental Education materials.

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Michael Kersten, Suring
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Don Olsen, Shawano
Elmer Schabo, Niagara
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Ruth Ward, Crivitz
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Gailen Braun, Lena
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Lousene Benter, Gillett

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David Bell, Neenah
Marie Below, Clintonville
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Lee Halberg, Appleton
Ronald Hammond, Hortonville
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CESA #8

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Lowell Baltz, Weyauwega
William Behring, Lourdes
David Bell, Neenah
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Mike Hawkins, Xavier
Beth Hawkins, Xavier
Ed Patschke, Menasha
Connie Peterson, St. Martin (L)
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Paul Kane, Ashwaubenon
Roy Lukes, Gibraltar
Sister Anna, St. Philips
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Joyce Mateju, Algoma
Richard Minten, W. DePere
Gloria Morgan, Linsmeier Private
George Pederson, Southern Door
Alan Schuh, Pulaski
Thomas Weyers, Cathedral
Ruth Windmuller, Green Bay
James Wiza, DePere
John Torgerson, Kewaunee
Benjamin Roloff, Howard-Suamico
Greg Schmitt, Cathedral
John DeWan, Green Bay
Emmajean Harmann, Sevastopol
Ray Gantenbein, Green Bay
David Bartz, Sturgeon Bay
John Hussey, Green Bay
Sister Barbara, St. Bernard
Robert Cook, UWGB
Dennis Bryan, UWGB

Ednajean Purcell, CSU
David West, Lawrence U.

C 1. Energy from the sun, the basic source
 O
 N of all energy, is converted through
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Discipline Area Lar

Subject Lar

Problem Orientation Ene

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING EXPERIENCES

Cognitive: The class will cut their sunflower into sections as to roots, blossom, leaves, & stem. Mix these up. Put back in order and label parts.
Affective: The student advocates that this is a concrete example of the use of the sun's energy.

Skills to be Learned
 Construction of sections of a plant
 Reconstruct plant in correct order
 Critical thinking

I. Student-Centered in class activity

1. Discussion of a sunflower using a picture or the flower.
2. Construct sunflower (blossom, roots, leaves, stem)
3. How do they think sunflower got its name.
4. Tell what the sun's job was in growing this plant.
5. Tell what would have happened if it had been without sun.
6. Tell values of sunflower (bird food, aesthetic, snacks)

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Discipline Area

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Problem Orientation

Energy use

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OBJECTIVES

SUGGESTED LEARNING EXPERIENCES

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I. Student-Centered in class
activity

1. Discussion of a sun-
flower using a picture
or the flower.
2. Construct sunflower
(blossom, roots, leaves,
stem)
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flower got its name.
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was in growing this
plant.
5. Tell what would have
happened if it had been
without sun.
6. Tell values of sun-
flower (bird food,
aesthetic, snacks)

II. Outside Resource and
Community Activities

ned
sections

c in

6

Resource and Reference Materials
Publications:

Continued and Additional Su

Audio-Visual:
Sunflower or a picture
of one.

Community:

Continued and Additional Suggested Learning Experiences

[The following text is extremely faint and largely illegible due to poor scan quality. It appears to be a list of learning experiences or activities, organized into two columns. Some discernible words include: "Students", "will", "be", "able", "to", "identify", "the", "main", "idea", "of", "the", "text", "and", "support", "it", "with", "evidence", "from", "the", "text".]

C 2. All living organisms interact among
 O themselves and their environment,
 N
 C forming an intricate unit called an
 E
 F ecosystem.
 T

Discipline Area Language

Subject Language

Problem Orientation Ecosy

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
<p><u>Cognitive:</u> The child will explain the difference between frogs and toads. The child will orally describe the place where we find frog eggs.</p> <p><u>Affective:</u> The child will choose which they would rather be-a frog or toad.</p> <p>Ex. - Frog-I like to swim. Toad- I like insects.</p>	<p>I. Student-Centered in class activity</p> <p>A. Read:</p> <ol style="list-style-type: none"> 1. <u>Frog and Toad are Friends</u> 2. <u>The Letter</u> 3. <u>Olly's Polliwogs</u> <p>B. Use above to discuss "life cycle".</p> <p>C. Discuss frog & toad activities:</p> <ol style="list-style-type: none"> 1. How and what they eat. 2. How they swim. <p>D. Discuss how frogs & toads change.</p> <p>E. How they fit into balance of nature.</p> <ol style="list-style-type: none"> 1. Eat bugs, etc. 2. Food for humans, and also other small animals. <p>F. Identify:</p> <ol style="list-style-type: none"> 1. Describe changes & relate information they have learned to the kindergarten. 	<p>II. Out</p> <p>Com</p> <p>A. "</p> <p>n</p> <p>h</p> <p>t</p> <p>e</p> <p>m</p>
<p><u>Skills to be Learned</u></p> <p>Record and sketch changes in egg appearances</p> <p>Make booklets about frogs</p> <p>Writing an informational article about frogs.</p> <p>Show & read pictures & stories to the kindergarten</p> <p>Find rhyming words</p>		

s interact among

Environment,

Discipline Area Language Arts

Unit called an

Subject

Language Arts

Problem Orientation Ecosystem Grade 2

SUGGESTED LEARNING EXPERIENCES	
ES 11	I. Student-Centered in class activity A. Read: 1. <u>Frog and Toad are Friends</u> 2. <u>The Letter</u> 3. <u>Olly's Polliwogs</u> B. Use above to discuss "life cycle". C. Discuss frog & toad activities: 1. How and what they eat. 2. How they swim. D. Discuss how frogs & toads change. E. How they fit into balance of nature. 1. Eat bugs, etc. 2. Food for humans, and also other small animals. F. Identify: 1. Describe changes & relate information they have learned to the kindergarten.
11 a. m.	II. Outside Resource and Community Activities A. The children will go to a nearby pond, bait store, or hatchery to obtain frog & toad eggs & observe them each day for changes using magnifying glass.
ances ogs al	

Resource and Reference Materials
Publications:

Books:

Frog and Toad are Friends

The Letter

Olly's Polliwog

All by Arnold Lobel

Continued and Additional Suggested

Audio-Visual:

Frog eggs in glass jar

Magnifying glass

Glass jar for polliwogs

Folk song, Froggie Went A Courting

Community:

s

Continued and Additional Suggested Learning Experiences

ing

C 2. All living organisms interact among
 O themselves and their environment,
 N
 C forming an intricate unit called
 E
 P
 T an ecosystem.

Discipline Area _____ La

Subject _____ La

Problem Orientation _____ Ec

BEHAVIORAL OBJECTIVES

Cognitive: Children will observe actual rabbits & realize need for being very quiet in observing. Children will use library for stories both factual and fanciful. Children may pretend to be a rabbit (Where will he look for food, shelter, protection from enemies.)

Affective: Each child evaluates for himself the good and bad traits of a rabbit.

Skills to be Learned

Evaluate ways in which the situation can be controlled

a. Traps
 Provide other source of food
 Protection of trees & shrubs

a. By repellent
 b. Covering trunks & branches

SUGGESTED LEARNING

- | I. Student-Centered in class activity | II. |
|---|-----|
| 1. Poem "The Rabbit" | |
| 2. Pretend that child is a rabbit: | |
| a. Where build his home? | |
| b. What are his natural enemies? | |
| 1. Man - hunting | |
| 2. Dogs - hunting | |
| 3. Foxes & hawks | |
| c. How can rabbit protect himself? | |
| 1. Color blends | |
| 2. Natural protection by snow | |
| 3. Panel discussion: | |
| a. Rabbits are nuisance and it is all right to set traps & hunt them. | |
| b. Rabbits enrich our lives & the damage done to trees and shrubs could have been eliminated. | |
| 1. Class will decide which presentation is best presented - pro and con. | |

organisms interact among

their environment,

cate unit called

Discipline Area Language Arts

Subject Language Arts

Problem Orientation Ecosystem Grade 2

OBJECTIVES

Children will
recognize rabbits &
beings very
young. Chil-
dren are very
curious for
information and
may
ask about
rabbit
habits for
protection
of child
self
traits

Children
which
be

Source of

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. Poem "The Rabbit"
2. Pretend that child is a rabbit:
 - a. Where build his home?
 - b. What are his natural enemies?
 1. Man - hunting
 2. Dogs - hunting
 3. Foxes & hawks
 - c. How can rabbit protect himself?
 1. Color blends
 2. Natural protection by snow
3. Panel discussion:
 - a. Rabbits are nuisance and it is all right to set traps & hunt them.
 - b. Rabbits enrich our lives & the damage done to trees and shrubs could have been eliminated.
 1. Class will decide which presentation is best presented - pro and con.

II. Outside Resource and Community Activities

Resource and Reference Materials
Publications:

Time for Poetry - A Teacher's
Anthology by May Hill Arbuthnot.
"The Rabbit" by Elizabeth
Madox Roberts, p. 96.

Audio-Visual:

Community:

Continued and Additional Suggest

The Rabbit

When they said the time to h
I hid back under a thick gray

And while I was still for th
A little gray thing came out

He hopped his way through th
And sat down close by a cabb

He sat down close where I co
And his big still eyes looke

His big eyes bursting out of
And I looked back very hard

From "Under the Tree

Elizabeth Madox

Materials

Continued and Additional Suggested Learning Experiences

Teacher's
Arbuthnot.
Elizabeth

The Rabbit

When they said the time to hide was mine,
I hid back under a thick grapevine.

And while I was still for the time to pass,
A little gray thing came out of the grass.

He hopped his way through the melon bed,
And sat down close by a cabbage head.

He sat down close where I could see,
And his big still eyes looked hard at me.

His big eyes bursting out of the rim,
And I looked back very hard at him.

From "Under the Tree" by

Elizabeth Madox Roberts

C 2. All living organisms interact among
 O themselves and their environment,
 N forming an intricate unit called
 C an ecosystem.
 E
 P
 T

Discipline Area _____ Lang _____

Subject _____ Lang _____

Problem Orientation _____ Ecos _____

BEHAVIORAL OBJECTIVES

Cognitive: Children will listen for ways to identify the presence of woodpeckers. Children will learn to identify kinds of woodpeckers and observe where they build nests.

Affective: Old, rotten trees, posts, etc. provide food for woodpeckers and provide places for nests; when we destroy these natural situations, we are destroying their environment. How would we feel if our home was destroyed.

Skills to be Learned

Listening for tapping
 Use of field glasses for identification
 Recognize local -
 a. Red-headed
 b. Hairy & downy
 Compare & contrast other similar habits

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. Poem: "The Woodpecker"
2. Collect pictures -- mural with environment added.
3. Draw pictures & write story about woodpecker observed.

4. Discussion:

Are woodpeckers necessary?
 What happens when all rotten & decayed positions of trees are removed?

Nesting places gone
 Food supply limited
 Are artificial methods possible to attract woodpeckers?

II. _____
 Co _____

organisms interact among

their environment,

icate unit called

Discipline Area Language Arts

Subject Language Arts

Problem Orientation Ecosystem Grade 2

OBJECTIVES

Children will
to identify
woodpeckers.
to identify
woodpeckers
they build

rotten
provide
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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. Poem: "The Woodpecker"
2. Collect pictures - mural with environment added.
3. Draw pictures & write story about woodpecker observed.
4. Discussion:
Are woodpeckers necessary?
What happens when all rotten & decayed positions of trees are removed?
Nesting places gone
Food supply limited
Are artificial methods possible to attract woodpeckers?

II. Outside Resource and Community Activities

Resource and Reference Materials

Publications:

Time for Poetry - A Teacher's
Anthology, "The Woodpecker,"
p. 84 by Elizabeth Madox
Roberts.

Audio-Visual:

Taped woodpecker sounds
Stuffed specimens from
local museum, etc.

Community:

Continued and Additional Suggested Le

The Woodpecker

The woodpecker pecked out a little
And made him a house in the teleph

One day when I watched he poked ou
And he had on a hood and a collar

When the streams of rain pour out
And the sparkles of lightning go f

And the big, big wheels of thunder
He can snuggle back in the telepho

From "Under the Tre
Elizabeth Mado

ials

Continued and Additional Suggested Learning Experiences

The Woodpecker

The woodpecker pecked out a little round hole
And made him a house in the telephone pole

One day when I watched he poked out his head,
And he had on a hood and a collar of red.

When the streams of rain pour out of the sky,
And the sparkles of lightning go flashing by,

And the big, big wheels of thunder roll,
He can snuggle back in the telephone pole.

From "Under the Tree" by

Elizabeth Madox Roberts

C 3. Environmental factors are limiting
 O on the numbers of organisms living
 C within their influence, thus, each
 E environment has a carrying capacity.
 P
 T

Discipline Area _____ La
 Subject _____ La
 Problem Orientation _____ Ca

BEHAVIORAL OBJECTIVES

Cognitive: Student will, using 2 cans, compare space used by used cans. Observe flattened & unflattened cans and give oral report on observation.
Affective: Student will observe that folded cans will take up less space; out of clutter, perhaps, cans can be recycled, thus, reusing metals.

Skills to be Learned
 Observation and comparison
 Chart for comparison
 Show space used by folded & unfolded cans.
 Speech skill/reporting

SUGGESTED LEARNING

I. Student-Centered in class activity
 1.
 II.

ESEA Title III - 59-70-0135-1 Project I-C-E

ntal factors are limiting

rs of organisms living

influence, thus, each

has a carrying capacity.

Discipline Area

Language Arts

Subject

Language Arts

Problem Orientation

Carrying

Capacity

Grade

2

L OBJECTIVES

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compare space
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flattened
oral report

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cycled, thus,

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nd compa-

parison
ed by folded
s.
reporting

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity
1.

II. Outside Resource and
Community Activities
1. Gather opened, used cans.
Sort, Remove paper
labeling, wash out can,
remove remaining end, &
flatten can.
2. Compare amount of space
used by original collec-
tion of cans to amount
used by flattened cans.
3. If possible, turn in
cans for re-use.
4. Chart and compare space
used.

Resource and Reference Materials

Publications:

Audio-Visual:

Community:

Sanitary Dept. Engineer

Companies - Local & national
using this procedure -their
pamphlets, booklets, may be
available. Contact Public
Relations Dept.

a. American Can Corp.

b. National Can

c. Continental Can

Continued and Additional Suggested Learning

Materials

Continued and Additional Suggested Learning Experiences

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C 4. An adequate supply of pure

O

N water is essential for life.

C

E

P

T

Discipline Area

Lang

Subject

Lang

Problem Orientation

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on

BEHAVIORAL OBJECTIVES

Cognitive: Children will describe the things found in polluted water using a word list.

Affective: Children feel flustered due to pollution. They will help by attempting to correct the situations.

Skills to be Learned
 Making distinctions
 Writing a word list
 Chart making

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

II.

1. Teacher & children collect pictures of fish - cut out:

a. healthy fish as fish for dinner

b. dying fish - pleasant & unpleasant

2. Put on chart.

3. Children give reasons for healthy & unhealthy fish; reasons could be pollution, debris, soap suds, etc.

4. Write ideas of the feelings of a fish in one of the two groups.

of pure

life.

Discipline Area Language Arts

Subject Language Arts

Effects of pollution

Problem Orientation on fish Grade 2

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. Teacher & children collect pictures of fish - cut out:

a. healthy fish as fish for dinner

b. dying fish - pleasant & unpleasant

2. Put on chart.

3. Children give reasons for healthy & unhealthy fish; reasons could be pollution, debris, soap suds, etc.

4. Write ideas of the feelings of a fish in one of the two groups.

II. Outside Resource and Community Activities

**Resource and Reference Materials
Publications:**

Continued and Additional Suggested

Audio-Visual:

Community:

rials

Continued and Additional Suggested Learning Experiences

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100. ...

C 5. An adequate supply of clean air is
 O
 N essential because most organisms
 C
 E depend on oxygen, through respiration, Subject
 P
 T to release the energy in their food. Problem Orientation Clean A

Discipline Area Language A

Language A

Clean A

BEHAVIORAL OBJECTIVES

Cognitive: Children will be able to name 3 pleasant & 3 unpleasant odors.
Affective: The teacher will put words or phrases in pairs, the child will reject the pairs of words which could be harmful by circling the pairs showing non-harmful odors.
 Ex. - Candy, bananas
 Gas, smoke
 Pumpkin pie, gasoline

Skills to be Learned

Listing
 Discussing
 Making judgments

SUGGESTED LEARNING EXPER

- I. Student-Centered in class activity
 A. Class
 1. Discuss with children why we can smell the hot-lunch.
 2. List odors which they like.
 3. List odors they dislike.
 4. Smell odors such as, smoke, onions, perfume, etc.
 5. Discuss how odors can be harmful to us.

II.

ply of clean air is

most organisms

Discipline Area Language Arts

through respiration, Subject

Language Arts

rgy in their food.

Problem Orientation

Clean Air

Grade

2

TIVES

	SUGGESTED LEARNING EXPERIENCES	
will pleasant her rases will words ful s odors. asoline	<p>I. Student-Centered in class activity</p> <p>A. Class</p> <ol style="list-style-type: none">1. Discuss with children why we can smell the hot-lunch.2. List odors which they like.3. List odors they dislike.4. Smell odors such as, smoke, onions, perfume, etc.5. Discuss how odors can be harmful to us.	<p>II. Outside Resource and Community Activities</p> <p>A. Outside activity</p> <ol style="list-style-type: none">1. Children will bring materials from home and community for a smelling party.2. Bring in pictures of polluted air.3. Bring in articles to smell, half of the room can bring in nice odors & the others, the bad odors.

Resource and Reference Materials
Publications:

Audio-Visual:

Community:

Continued and Additional Suggested

Continued and Additional Suggested Learning Experiences

C 6. Natural resources are not equally

O

N distributed over the earth or over

C

E time and greatly affect the geographic

P

T conditions and quality of life.

Discipline Area

Language

Subject

Language

Problem Orientation Resource

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING EXPERIENCES

Cognitive: To construct a picture story showing at least 3 environmental resources of the far North or that of our region.
Affective: The children will respond to the situation: Eskimos have many days of darkness. Wouldn't it be a good idea to take electric light bulbs, hot plates, and electric heaters there & sell them to the Eskimos?

Skills to be Learned

To compare difference in:
 food
 weather
 possessions, etc.
 Show a specific idea on a picture

I. Student-Centered in class activity

1. Teacher reads a story about Eskimo life.

2. Teacher & children discuss how the life of Eskimos is similar to & different than ours. Include:

food
 possessions
 natural resources

3. The children will draw conclusions (teacher will write on board) which tell the effects on each group's life because of the quantity of water, snow, trees, growing weather.

4. Divide the class into 2 or more groups & have each group draw a picture showing the natural resources of the area.

5. The children could make charts comparing clothes, food, animals of the two areas.

II. C
 Co

are not equally

earth or over

Discipline Area

Language Arts

ct the geographic

Subject

Language Arts

y of life.

Problem Orientation Resource Usage Grade 2

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SUGGESTED LEARNING EXPERIENCES

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I. Student-Centered in class activity

1. Teacher reads a story about Eskimo life.

2. Teacher & children discuss how the life of Eskimos is similar to & different than ours. Include:

food

possessions

natural resources

3. The children will draw conclusions (teacher will write on board) which tell the effects on each groups life because of the quantity of water, snow, trees, growing weather.

4. Divide the class into 2 or more groups & have each group draw a picture showing the natural resources of the area.

5. The children could make charts comparing clothes, food, animals of the two areas.

II. Outside Resource and Community Activities

Resource and Reference Materials
Publications:

Continued and Additional Suggested L

Audio-Visual:

Community:

als

Continued and Additional Suggested Learning Experiences

C 7. Factors such as facilitating transportation,
O
N economic conditions, population growth, Discipline Area Language
C
E and increased leisure time have a great Subject Language
P
T influence on changes in land use and Problem Orientation Tran
centers of population density.

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING								
<p><u>Cognitive:</u> A movie will be constructed by the class which shows the sequence of land transportation & how it caused change in land use.</p> <p><u>Affective:</u> The teacher will provide a list of modes of transportation to be rated in groups according to the greatest effects on land use.</p> <p>Example:</p> <table border="0"> <tr> <td>Wagon <u>3</u></td><td>Airplanes <u>3</u></td></tr> <tr> <td>Walking <u>4</u></td><td>Jets <u>2</u></td></tr> <tr> <td>Railroad <u>2</u></td><td>Horses <u>4</u></td></tr> <tr> <td>Jets <u>1</u></td><td>Cars <u>1</u></td></tr> </table>	Wagon <u>3</u>	Airplanes <u>3</u>	Walking <u>4</u>	Jets <u>2</u>	Railroad <u>2</u>	Horses <u>4</u>	Jets <u>1</u>	Cars <u>1</u>	<p>I. Student-Centered in class activity</p> <p>A. Classroom</p> <p>1. The children will form groups & make a movie showing the sequence of land transportation & changes needed for each.</p>
Wagon <u>3</u>	Airplanes <u>3</u>								
Walking <u>4</u>	Jets <u>2</u>								
Railroad <u>2</u>	Horses <u>4</u>								
Jets <u>1</u>	Cars <u>1</u>								
<p><u>Skills to be Learned</u></p> <p>Sequential order</p> <p>Listing</p>									

s facilitating transportation,

ns, population growth, Discipline--Area Language Arts

sure time have a great Subject

Language Arts

ges in land use and Problem Orientation Transportation Grade 2
tion density.

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
will be class uence of & how land cher of modes o be ording ects nes <u>3</u> <u>4</u>	<p>I. Student-Centered in class activity</p> <p>A. Classroom</p> <p>1. The children will form groups & make a movie showing the sequence of land transportation & changes needed for each.</p>	<p>II. Outside Resource and Community Activities</p> <p>A. Projects</p> <p>1. The children & teacher will go for a walk & note the various ways of land transportation.</p> <p>2. When they get back to the classroom, a composite list of ways of transportation will be made:</p> <p>a. Ways he observed on walk</p> <p>b. Other ways</p> <p>3. Discussion will follow:</p> <p>a. Modes of travel in sequential order.</p> <p>b. What had to be done to our land when each new way was discovered?</p> <p>c. Why were more ways of transportation needed?</p>

**Resource and Reference Materials
Publications:**

Continued and Additional Sugges

Audio-Visual:

Community:

s

Continued and Additional Suggested Learning Experiences

C 8. Cultural, economic, social, and
 O
 N political factors determine status
 C
 E of man's values and attitudes
 P
 T toward his environment.

Discipline Area Language
 Subject Language
 Problem Orientation Pollut

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING EXPERIENCES

Cognitive: Student will observe for one day: (taking notes) signs of pollution in the air and in the environment.
Affective: What things do I do that cause pollution?

Skills to be Learned
 Observation of positive and negative factors
 Taking notes of observation
 Posters

I. Student-Centered in class activity

II. Out-of-classroom

1. Make notes to look for following things:

a. Air pollution:

1) chimneys .

2) cars, trucks

b. Scenic pollution

1) garbage

2) junking old cars

c. Noise pollution

1) home

2) school

2. Do we need noise?

How much can be tolerated?

a. small children

b. school children

c. adults, older brothers and sisters

d. parents

e. grandparents

3. Discussion - how to cope with each individual's particular problem.

conomic, social, and

s determine status

and attitudes

onment.

Discipline Area Language Arts

Subject Language Arts

Problem Orientation Pollution Grade 2

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
C will y: ns of ir and hings	<p>I. Student-Centered in class activity</p> <p>1. Make notes to look for following things:</p> <p>a. Air pollution:</p> <p>1) chimneys</p> <p>2) cars, trucks</p> <p>b. Scenic pollution</p> <p>1) garbage</p> <p>2) junking old cars</p> <p>c. Noise pollution</p> <p>1) home</p> <p>2) school</p> <p>2. Do we need noise? How much can be tolerated?</p> <p>a. small children</p> <p>b. school children</p> <p>c. adults, older brothers and sisters</p> <p>d. parents</p> <p>e. grandparents</p> <p>3. Discussion - how to cope with each individual's particular problem.</p>	<p>II. Outside Resource and Community Activities</p>
ed sitive rs observation		

Resource and Reference Materials
Publications:

Continued and Additional Suggested I

Audio-Visual:

newspaper & magazine pictures
(for discussion)
cameras

Community:

Contact TV & radio stations for
coverage of school project
Sanitation Dept.
Water Dept.
City/County officials

Materials	Continued and Additional Suggested Learning Experiences
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<p>es</p> <p>for</p>	<p>[Faint, illegible text in the main body of the table]</p>
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C 9. Man has the ability to manage,
O
N manipulate, and change his
C
E environment.

Discipline Area

Subject

Problem Orientation

BEHAVIORAL OBJECTIVES

Cognitive: Children will select some specific area to evaluate over a period of time. Each can decide on area to be observed. Seasons can change aspect of environment.
Affective: Given a picture to observe, child suggests what he would do to improve site.

Skills to be Learned

Watching for specific areas to concentrate on
Compare area-Earth's scars from road constructions, abandoned cars & machinery covered with snow, spring shows up pollution
Note taking
Story writing

SUGGESTED LEARNING ACTIVITIES

- I. Student-Centered in class activity
 - A. Classroom activity
 1. Children will decide what area they plan to observe.
 2. Each group reports on area of choice.
 3. They will also decide at what intervals they will make observations time of day, morning or night.
 4. Aesthetic evaluation
 - a. What is objectionable? Why?
 - b. What is good? Why?
 5. Write stories about observations.
 - a. Spelling list of words children suggest to enable them to compose stories
 - b. Compare notes from first observation with last observed and compare.
 1. Has spelling improved?
 2. Good sentence structure?
 6. Children may read stories to classmates.

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Discipline Area Language Arts

Subject Language Arts

Appreciation

Problem Orientation & Observation Grade 2

TIVES

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spring

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

A. Classroom activity

1. Children will decide what area they plan to observe.
2. Each group reports on area of choice.
3. They will also decide at what intervals they will make observations-time of day, morning or night.
4. Aesthetic evaluation:
 - a. What is objectionable? Why?
 - b. What is good? Why?
5. Write stories about observations.
 - a. Spelling list of words children suggest to enable them to compose story.
 - b. Compare notes from first observation to last observed and compare.
 1. Has spelling improved?
 2. Good sentence structure?
6. Children may read stories to classmates.

II. Outside Resource and Community Activities

ce Materials	Continued and Additional Suggested Learning Experiences
<p>ews areas erved gn making</p>	<p>Continued and Additional Suggested Learning Experiences</p>

C 11. Individual acts, duplicated

O

N or compounded, produce significant Discipline Area Language Art

C

E environmental alterations over Subject Library

P

T time. Problem Orientation Abuse

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING EXPERIENCE

Cognitive: The students will answer four out of five correct answers to "yes" or "no" questions to tell the right ways of "marking-the-place" in a book.

Affective: The teacher will watch to see how books are marked and listen to see if children tell each other what to do.

I. Student-Centered in class activity

A. The teacher will say there is one child in the room who is a very good reader, but when library reading time is up, he bends the corner of the page to mark his place in the library book.

1. What would happen if all our class members did this?

2. If the entire school did this?

3. If everyone who went to the library did this?

4. Is this taking care of our library environment?

5. What other ways could we keep our place in a book?

6. Bookmarks will be made.

II. Out Comm

Skills to be Learned

Logical thinking

Proper care of books

Project I-C-E

ESEA Title III - 59-70-0135-1

Duplicated

duce significant Discipline Area Language Arts

erations over Subject Library

Problem Orientation Abuse Grade 2

ES	SUGGESTED LEARNING EXPERIENCES	
will	<p>I. Student-Centered in class activity</p> <p>A. The teacher will say there is one child in the room who is a very good reader, but when library reading time is up, he bends the corner of the page to mark his place in the library book.</p> <ol style="list-style-type: none">1. What would happen if all our class members did this?2. If the entire school did this?3. If everyone who went to the library did this?4. Is this taking care of our library environment?5. What other ways could we keep our place in a book?6. Bookmarks will be made.	<p>II. Outside Resource and Community Activities</p>
or he he- ill re if		

Resource and Reference Materials
Publications:

Continued and Additional Suggest

Audio-Visual:

Community:

Continued and Additional Suggested Learning Experiences

C 12. Private ownership must be re-
 O
 N garded as a stewardship and should
 C
 E not encrouch upon or violate the
 P
 T individual right of others.

Discipline Area Language A
 Subject Language A
 Problem Orientation Land

BEHAVIORAL OBJECTIVES

Cognitive: After taking a field trip the child will identify three wild flowers.
Affective: The students will try to preserve wild flowers for other to enjoy.

Skills to be Learned Planning field trip -

Transportation-bus or walk
 Observe flowers-natural setting
 Take notes
 Make sketches
 On return:
 Find illustrations and note pages.

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity	II. Out
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Discipline Area Language Arts
 Subject Language Arts
 Problem Orientation Land Use Grade 2

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
making wild dents e wild o	I. Student-Centered in class activity	II. Outside Resource and Community Activities Field trip: 1. Children will look for place where wild flowers grow. 2. Children will observe area carefully and look specifically for certain flowers. 3. May sketch hastily: leaves, indicate colors, flowers, shade of green, bud, seed. 4. If wild flower is an annual and not protected by law. Flowers may be taken to: a. Sketch b. Press and preserve 5. If biennial - a. Recognize leaves and plants b. Learn that it takes two years to produce seeds. 6. If bulbs - may grow from seeds - produce bulb and reproduce in two ways. For discussion: Ownership responsibility
d - or tural s and		

Resource and Reference Materials
Publications:

Continued and Additional Suggested I

Audio-Visual:

Community:

Continued and Additional Suggested Learning Experiences

PROJECT I-C-E

Episode Evaluation Form (Reproduce or duplicate as needed)

In commenting on each episode used in your class, you may wish to use the following format. Please feel free to adapt it and add more pages. Leave space for student and comments - negative and positive.

I. Behavioral Objectives

A. Cognitive:

B. Affective:

II. Skills Developed

III. Suggested Learning Experiences

A. In Class:

B. Outside & Community Activities:

IV. Suggested Resource & Reference Materials (specific suggestions & comments)

PROJECT I-C-E

Episode Evaluation Form (Reproduce or duplicate as needed)

g on each episode used in your class, you may wish to duplicate this suggested
e feel free to adapt it and add more pages. Let us know all your critiques
negative and positive.

l Objectives
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Learning Experiences
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e & Community Activities:

Resource & Reference Materials
suggestions & comments)

Project I - C - E

INSTRUCTION - CURRICULUM - ENVIRON

ED055919

A SUPPLEMENTARY PROGRAM FOR ENVIRONMENTAL EDUCATION

DISCIPLINE AREA Language Arts GRADE 3

Produced under Title III E.S.E.A.
PROJECT I-C-E
Serving Schools in CESA's 3-8-9
1927 Main Street
Green Bay, Wisconsin 54301
(414) 432-4338

Robert
Robert
George

I - C - E

INSTRUCTION - CURRICULUM - ENVIRONMENT

MENTARY PROGRAM FOR ENVIRONMENTAL EDUCATION

NE AREA Language Arts GRADE 3

under Title III E.S.E.A.

I-C-E

Schools in CESA's 3-8-9

Street

, Wisconsin 54301

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Robert Warpinski, Director
Robert Kellner, Asst. Director
George Howlett, EE Specialist

PREFACE

If you wish to excite students about their environment, help is re of over a hundred teachers, year long meetings, a summer workshop, un ecologists, this guide means realistic, developed aid for you. Pleas which have directed teachers in writing and editing this guide.

1. This guide is supplementary in nature and the episodes are design ces--to plug into existing, logical course content.
2. Each page or episode offers suggestions. Since you know your stu to adapt, adopt, or use. By design, the range of suggestions is wi mentation and usage are even wider. Many episodes are self-contain others can be changed in part or developed more keenly over a few possibilities allow you to explore.
3. Now we urge that you try the episodes and suggested learning exper plan. The reasons are simple. No guide has all the answers and unless viewed in the context of your classroom situation. Thus, I give it a triple reading, check over the resources listed, make me prime your students, and seek help. The Project personnel and teach knowledge page stand ready to aid your efforts. Feel free to a
4. The Project Resource Materials Center serves all CESA 3, 2, and 9 private. We will send available materials pre-paid. Call for any visit. Phone 432-4338.
5. Check often the Project ICE Bibliography in your school library fo Center materials. Please offer suggestions, comments, or advice-- service may grow. Let's help each other.
6. Involve yourself with the guide by reacting to it with scratch ide suggestions on the episode pages or use the attached evaluation fo lected in late May next year and will be used in our revisions. We reactions and suggestions--negative and positive. Please note that in the episodes may refer to specific, local community resources c cases, individual school districts and teachers will have to adopt stitutes. A list of terms pertinent to the episodes is below.
7. Ecologists and other experts have simplified the issue--survival-- Creation's beauty and complexity--often noted as the work of a gen and human energy to save. A year's work by a hundred of your fell gesture. Without you, their work will crumble, and so might we al let us live to think, feel, and act in harmony with our world.

1. Cognitive means a measurable mental skill, ability, or process
2. Affective refers to student attitudes, values, and feelings.
3. APWI means Acceptable Performance Will Include (labels a cognit
4. EPA - Environmental Problem Area.

PREFACE

students about their environment, help is ready. Thanks to the efforts of teachers, year long meetings, a summer workshop, university consultants and means realistic, developed aid for you. Please note the following ideas of teachers in writing and editing this guide.

Elementary in nature and the episodes are designed--at appropriate instances--for existing, logical course content.

The guide offers suggestions. Since you know your students best, you decide what to use. By design, the range of suggestions is wide; your chances for experience are even wider. Many episodes are self-contained, others open-ended, still others to be developed more keenly over a few weeks. These built-in episodes invite you to explore.

Try the episodes and suggested learning experiences but please pre-plan to make them simple. No guide has all the answers and no curriculum will work in the context of your classroom situation. Thus, before trying an episode, check over the resources listed, make mental and actual notes, and seek help. The Project personnel and teachers listed on the acknowledgment are ready to aid your efforts. Feel free to ask their help in pre-planning. The Materials Center serves all CESA 3, 8, and 9 area schools--public and private--and available materials pre-paid. Call for any help, materials, or to 388.

See the ICE Bibliography in your school library for available Resource Center. Please offer suggestions, comments, or advice--at any time--so that this effort's help each other.

Use the guide by reacting to it with scratch ideas, notes, and extended episode pages or use the attached evaluation format, which will be collected next year and will be used in our revisions. We sincerely want your reactions--negative and positive. Please note that some resources listed refer to specific, local community resources or conditions. In such school districts and teachers will have to adopt local or available substitutes pertinent to the episodes is below.

Experts have simplified the issue--survival--yours, mine, our students, the complexity--often noted as the work of a genius--will take our genius to have. A year's work by a hundred of your fellow teachers is a saving grace, their work will crumble, and so might we all--literally. Instead, feel, and act in harmony with our world.

Editorial Board

Measurable mental skill, ability, or process based on factual data. Student attitudes, values, and feelings.

Whole Performance Will Include (labels a cognitive or mental performance.) Problem Area.

ACKNOWLEDGEMENTS: The following teachers and consultants participated
of the Supplementary Environmental Education Grants

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Lee Halberg, Appleton
Ronald Hammond, Hortonville
Jerome Hennes, Little Chute
Barbara Huth, Menasha
Darrell Johnson, Hortonville
Bernadyne King, Neenah
Harold Lindhorst, St. Martin (L)
John Little, Winneconne
Gordon Rohloff, Oshkosh
William Schaff, St. Joseph
Doris Stehr, Mt. Calvary (L)
Carolyn Shills, New London
Sister Dorothy, Xavier
Clarence Trentlage, Freedom
Mike Hawkins, Xavier
Beth Hawkins, Xavier
Ed Patschke, Menasha
Connie Peterson, St. Martin (L)
Dallas Werner, Kaukauna
Ron Schreier, Omro

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Ednajean Purcell, OSU
Inette David West, Lawrence U.

Robert Cook, UWGB
Dennis Bryan, UWGB

C 1. Energy from the sun, the basic source
 O
 N of all energy, is converted through
 C
 E plant photosynthesis into a form all
 P
 T living things can use for life pro-
 cesses.

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 Subject Area _____ Lan
 Problem Orientation Ener

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES
<p><u>Cognitive:</u> The student will relate, by means of writing a creative story on what a world would be without a sun.</p> <p><u>Affective:</u> Students will realize that without the benefits of the sun's rays, there could be no life on earth. The children will defend the need of the sun in our lives.</p>	<p>I. Student-Centered in class activity</p> <p>1. The teacher could throw out the question - "What would happen if the sun suddenly disappeared?" Have the children give ideas. (Ex. - How might the earth be different if there were no sun? Would it be dark and lifeless? Would it be cold? Why or why not?</p> <p>2. Following the above discussion, write a creative story, "I am living in a world without a sun."</p>
<p><u>Skills to be Learned</u></p> <p>Discussing</p> <p>Writing</p>	

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converted through

Discipline Area

Language Arts

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Subject Area

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Problem Orientation Energy Use

Grade 3

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ACTIVES

SUGGESTED LEARNING EXPERIENCES

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I. Student-Centered in class activity

1. The teacher could throw out the question - "What would happen if the sun suddenly disappeared?" Have the children give ideas. (Ex. - How might the earth be different if there were no sun? Would it be dark and lifeless? Would it be cold? Why or why not?

2. Following the above discussion, write a creative story, "I am living in a world without a sun."

II. Outside Resource and Community Activities

Resource and Reference Materials
Publications:

Books:

World Book Encyclopedia, Volume S.
Modern Science, Book 3, Smith,
Belcha, Press. Laidlow, 1970.
pp. 101-111; Bk. 4 - p. 156-57.

Science: Comparing Things, Bk. 4.
McMillan Co. by Bernard and
Lavatelli. pp. 23-26; 63, 68,
136-37 (1970)

Science in Your Life, Bk. 4.
by Schneider. pp. 428, 443,
447. D.C. Heath Co. 1968

Audio-Visual:

Filmstrips:

Source: D.C. Heath & Co.,
45 S. Dean St., Englewood,
N.J. 07631. (May be rented
or purchased.)

The Seasons of the Year -
Set 1 & 2 A

Sunlight & the Earth's Tempe-
rature - Set 4A

The World of Living Things -
Set 5A

Community:

Continued and Additional Suggeste

	Continued and Additional Suggested Learning Experiences
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C 2. All living organisms interact among
 O
 N themselves and their environment,
 C
 E forming an intricate unit called an
 P
 T ecosystem.

Discipline Area La
 Subject La
 Problem Orientation

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING ACTIVITIES
<p><u>Cognitive:</u> A demonstration by the children, depicting family living in harmony and out of harmony. They will infer harmony is best.</p> <p><u>Affective:</u> Children will promote happy family relationships in their lives.</p>	<p>I. Student-Centered in class activity</p> <p>A. Play SRA record or family story.</p> <p>B. List members of the family living together-mother, father, brother, sister, grandmother, etc.</p> <p>C. Divide class into groups. Each group write a playlet showing:</p> <ol style="list-style-type: none"> 1. How the family members work together happily. 2. What happens when disagreements arise. <p>D. Put on playlets.</p>
<p><u>Skills to be Learned</u></p> <p>Create an idea</p> <p>Work in a group</p> <p>Participate in the playlet</p>	

organisms interact among

their environment,

Discipline Area Language Arts

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Subject Language Arts

Problem Orientation Ecosystem Grade 3

OBJECTIVES

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SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
- A. Play SRA record or family story.
 - B. List members of the family living together-mother, father, brother, sister, grandmother, etc.
 - C. Divide class into groups. Each group write a playlet showing:
 - 1. How the family members work together happily.
 - 2. What happens when disagreements arise.
 - D. Put on playlets.

II. Outside Resource and Community Activities

Resource and Reference Materials
Publications:

Continued and Additional Su

Audio-Visual:

SRA

Social Studies

Record I

Side I

Filmstrip pertaining to
Family Sharing & Living

Community:

1s

Continued and Additional Suggested Learning Experiences

C 3. Environmental factors are limiting
 O
 N on the numbers of organisms living
 C
 E within their influence thus, each
 P
 T environment has a carrying capacity

Discipline Area

Subject

Problem Orientation

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING ACTIVITIES

Cognitive: Children will differentiate between a party of a limited number and one where the party became overcrowded through question & answer.
Affective: The children will feel the impact of crowded condition vs. uncrowded conditions.

Skills to be Learned

Critical thinking
 Mental creative exercise
 Drawing conclusions

- I. Student-Centered in class activity
1. Teacher creates an imaginative situation:
 - a. All are invited to a birthday party-unknown to hostess children brought their brothers and sisters.
 2. Questions: Will there be enough room for games, food, prizes, and fun?
 3. Will our chance for a prize be more or less?
 4. What will too many at the party do to our good time.

factors are limiting

organisms living

Discipline Area

Language Arts

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Language Arts

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Problem Orientation

Population

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Grade

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SUGGESTED LEARNING EXPERIENCES

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I. Student-Centered in class activity

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a. All are invited to a birthday party-unknown to hostess children brought their brothers and sisters.

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3. Will our chance for a prize be more or less?

4. What will too many at the party do to our good time.

II. Outside Resource and Community Activities

Resource and Reference Materials
Publications:

Continued and Additional Sug

Audio-Visual:

Community:

C 4. An adequate supply of pure

O

N water is essential for life.

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Discipline Area

Subject

Problem Orientation W

BEHAVIORAL OBJECTIVES

Cognitive: Five words which describe pure or impure water will be learned for spelling. Sentences will be written describing pure or impure water.*

Affective: By knowing these descriptive words about water, he will be able to tell why he needs pure water.

Skills to be Learned

Sentence writing
Spelling
Choosing descriptive word

* The children will be given word cards describing conditions of water. Each child will classify his words under the heading of pure & impure water.

SUGGESTED LEARNING

- I. Student-Centered in class activity
 1. The teacher will put the word "water" on the board.
 2. The students will list any words which describe water.
 3. These words will then be divided into two groups.
 - a. Words which describe water which could be pure.
 - b. Words which could describe impure water.
 4. Sentences can be written using any of the words from above list.
 5. Children will choose 5 or more words to learn to spell.
 6. Thinking of these words children will discuss the need for all of us to have good, pure water.

the supply of pure

essential for life.

Discipline Area Language Arts

Subject Language Arts

Adequate

Problem Orientation Water Supply Grade 3

OBJECTIVES

1. Pure words
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SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
1. The teacher will put the word "water" on the board.
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 - a. Words which describe water which could be pure.
 - b. Words which could describe impure water.
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 5. Children will choose 5 or more words to learn to spell.
 6. Thinking of these words children will discuss the need for all of us to have good, pure water.

- II. Outside Resource and Community Activities

<u>Resource and Reference Materials</u> <u>Publications:</u>	Continued and Additional Suggested
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Visual:

Community:

rials

Continued and Additional Suggested Learning Experiences

C 5. An adequate supply of clean air, is

O essential because most organisms

C depend on oxygen, through respiration,

P to release the energy in their food.

Discipline Area Language

Subject Language

Problem Orientation Clea

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING EXP

Cognitive: They will ~~list~~ words that tell about the conditions of the air. They will write a poem or prose about air. Adv. students may want to create their own.
Affective: A list of words describing pure and impure air will be given to the child. He will put a P by the words that represent pure and an I by impure. (As smoke, supper cooking)

I. Student-Centered in class activity

A. Class activity

1. Have children give words which describe air as the teacher lists them on board. (Muggy, clean, foggy, smelly, polluted)
2. Discuss meaning of words bringing in the fact that living organisms need air.
3. Class write a composite poem or prose about air.
4. Advanced students may wish to compose their own.

II.

Skills to be Learned

Vocabulary development
Poem or prose writing

supply of clean air, is

most organisms

Discipline Area Language Arts

, through respiration,

Subject

Language Arts

energy in their food.

Problem Orientation

Clean Air

Grade 3

OBJECTIVES

SUGGESTED LEARNING EXPERIENCES

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I. Student-Centered in class activity

A. Class activity

1. Have children give words which describe air as the teacher lists them on board.
(Muggy, clean, foggy, smelly, polluted)
2. Discuss meaning of words bringing in the fact that living organisms need air.
3. Class write a composite poem or prose about air.
4. Advanced students may wish to compose their own.

II. Outside Resource and Community Activities

Materials

Continued and Additional Suggested Learning Experiences

C 6. Natural resources are not equally

O

N distributed over the earth or over

C

E time and greatly affect the geographic

P

T conditions and quality of life.

Discipline Area _____ La

Subject _____ La

Problem Orientation Res _____

BEHAVIORAL OBJECTIVES

Cognitive: Students will demonstrate by means of oral or written reports, some of the ways in which minerals can be recycled, in order to insure an adequate supply for future use.
Affective: How did you feel about the responses of the people in our community when you asked _____ were willing to turn in bottles and cans? The responses could be very willing, rather willing, or unwilling.

SUGGESTED LEARNING

- | I. Student-Centered in class activity | II. |
|---|-----|
| 1. Children can make verbal reports of their findings in the survey. | |
| 2. Short original poems about pollution of streams, and littering of highways. This could include the Haiku form of unrhymed verse. | |

Skills to be Learned

Reporting
 Writing poems
 Writing stories
 Discussion

resources are not equally

d over the earth or over

greatly affect the geographic

and quality of life.

Discipline Area

Language Arts

Subject

Language

Problem Orientation Resource Usage Grade 3

GENERAL OBJECTIVES

Students will
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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

1. Children can make verbal reports of their findings in the survey.
2. Short original poems about pollution of streams, and littering of highways. This could include the Haiku form of unrhymed verse.

II. Outside Resource and
Community Activities

1. Collect empty soda and re-use beer bottles and return them to the stores for refunds and reuse.
2. Collect used cans of both aluminum and tin for recycling purposes.
3. Children may survey their neighborhoods, to find if people are willing to turn in bottles and cans.

Learned

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ries

Resource and Reference Materials	Continued and Additional Suggeste
<p><u>Publications:</u></p> <p><u>Grade Teacher</u>, Dec., '70, p. 4</p> <p>"About Pollution"</p> <p><u>The Elks Magazine</u> Feb., '71.</p> <p>"Ten Things to Tell Your Wife</p> <p>About Pollution." pp. 8-10, 29.</p> <p>Pamphlet - "Conserving Our Waters and Cleaning the Air." American Petroleum Institute. 1271 Avenue of the Americas. New York City, New York 10010</p> <p><u>Audio-Visual:</u></p> <p><u>Filmstrip - Water for Tomorrow.</u></p> <p>Two color filmstrips and record.</p> <p>Teacher's Guide. 1810 Mackenzie Drive, Columbus, Ohio.</p> <p><u>Community:</u></p> <p>Local company (interview, brochures, and information)</p>	

Materials	Continued and Additional Suggested Learning Experiences
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C 7. Factors such as facilitating transportation,
O
N economic conditions, population growth, Discipline Area Language
C
E and increased leisure time have a great Subject Language
P
T influence on changes in land use and Problem Orientation Trans
centers of population density.

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING EXPERIENCES

Cognitive: Compare the roads of long ago with the modern day roads showing a change in uses due to population growth.
Affective: The teacher will give a hypothetical situation such as, a man with a small farm on the edge of town cannot raise enough food to feed his cows and he cannot buy more land. What should he do and why?

Skills to be Learned
 Interpreting
 Illustrating
 Comparisons

- I. Student-Centered in class activity
 A. Classroom
 1. The teacher will use pictures of different types of roads for comparison.
 2. The students will compare farms, towns, cities of today to the farms, towns & cities of long ago. e.g. Cobblestone streets vs cement streets, dirt roads vs asphalt roads
 3. Discussion will follow telling why people move about now & how they moved about years ago.
 4. The students will pick out an area & make a picture, showing what it looked like years ago & how it has been changed to help us move from place to place. e.g. Dirt roads vs freeways.

uch as facilitating transportation,

ditions, population growth, Discipline Area Language Arts

d leisure time have a great Subject Language Arts

a changes in land use and Problem Orientation Transportation Grade 3
population density.

AL OBJECTIVES

SUGGESTED LEARNING EXPERIENCES

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activity

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e.g. Dirt roads vs freeways.

II. Outside Resource and
Community Activities

ence Materials

Continued and Additional Suggested Learning Experiences

C 8. Cultural, economic, social, and
 O political factors determine status
 N
 C
 E of man's values and attitudes
 P
 T toward his environment.

Discipline Area _____ Language _____
 Subject _____ Language _____
 Problem Orientation _____ Economic _____
 Attitude _____

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES
<p><u>Cognitive:</u> The children will distinguish between the needs of a family and the luxuries by classifying pictures into the above 2 groups and will tell the resources of our environment needed and those which are luxuries..</p> <p><u>Affective:</u> Is it true that our needs and luxuries use up our natural resources and at the same time cause a pollution problem.</p>	<p>I. Student-Centered in class activity</p> <ol style="list-style-type: none"> 1. Children bring to class a picture of their family & catalogs & magazines. 2. The children will cut out pictures showing what the family needs & what the family wants. 3. A discussion will follow on what happens to our natural resources & pollution of our country when everyone has what he wants & what he needs. 4. Have a list of resources & tell children what resource was used for articles from No. 2. Library references may have to be used. <p>II. Out of class activities</p>
<p><u>Skills to be Learned</u></p> <p>Classifying</p> <p>Critical thinking</p> <p>Using library references</p>	

conomic, social, and

s determine status

and attitudes

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Discipline Area

Language Arts

Subject

Language Arts

Economic

Problem Orientation

Attitudes

Grade

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OBJECTIVES

Children
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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. Children bring to class a picture of their family & catalogs & magazines.

2. The children will cut out pictures showing what the family needs & what the family wants.

3. A discussion will follow on what happens to our natural resources & pollution of our country when everyone has what he wants & what he needs.

4. Have a list of resources & tell children what resource was used for articles from No. 2. Library references may have to be used.

II. Outside Resource and Community Activities

Resource and Reference Materials <u>Publications:</u>	Continued and Additional Suggested Learning
<u>Audio-Visual:</u>	
<u>Community:</u>	

Materials	Continued and Additional Suggested Learning Experiences
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	<p>1. Read the story "The Boy Who Cried Wolf" and discuss the importance of honesty.</p> <p>2. Write a short story about a person who lies.</p> <p>3. Act out the story "The Boy Who Cried Wolf" using puppets.</p> <p>4. Draw a picture of the boy who cried wolf.</p> <p>5. Write a letter to the boy who cried wolf, telling him how his actions affected the villagers.</p> <p>6. Discuss the story "The Boy Who Cried Wolf" with a friend or family member.</p> <p>7. Write a poem about the story "The Boy Who Cried Wolf".</p> <p>8. Create a class book about the story "The Boy Who Cried Wolf".</p> <p>9. Write a play about the story "The Boy Who Cried Wolf".</p> <p>10. Draw a picture of the boy who cried wolf and the villagers.</p> <p>11. Write a letter to the boy who cried wolf, telling him how his actions affected the villagers.</p> <p>12. Discuss the story "The Boy Who Cried Wolf" with a friend or family member.</p> <p>13. Write a poem about the story "The Boy Who Cried Wolf".</p> <p>14. Create a class book about the story "The Boy Who Cried Wolf".</p> <p>15. Write a play about the story "The Boy Who Cried Wolf".</p> <p>16. Draw a picture of the boy who cried wolf and the villagers.</p> <p>17. Write a letter to the boy who cried wolf, telling him how his actions affected the villagers.</p> <p>18. Discuss the story "The Boy Who Cried Wolf" with a friend or family member.</p> <p>19. Write a poem about the story "The Boy Who Cried Wolf".</p> <p>20. Create a class book about the story "The Boy Who Cried Wolf".</p>
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C 10. Short-term economic gains may
O
N produce long-term environmental
C
E losses.
P
T

Discipline Area Language
Subject Dramatization
Problem Orientation of Re

BEHAVIORAL OBJECTIVES
Cognitive: By dramatizing & discussing, the students will show ability to empathize with each point of view in the killing for sport situation and will realize that short-term gains may mean long-term loss.
Affective: By volunteering observations in a class discussion, the student accepts the fact that short-term environmental gains may produce long-term environmental loss.

Skills to be Learned
Dramatizing
Critical judgement
Verbal empathy
Creative writing
Oral skills

- SUGGESTED LEARNING EXPERIENCES**
- I. Student-Centered in class activity
 - A. Classroom
 1. Read poem, Hunting Song by Donald Finkel to class.
 2. Students decide what is meant in each stanza & how the character of each stanza feels.
 3. Discussion of why the hunter wanted to kill the fox.
 4. Discuss whether this is a good or poor idea, including what could happen if too many fox are killed.
 5. The children will form into small groups & give an extemporaneous dramatization in which the characters are animals & hunters.
 6. Children will give their viewpoints on hunter's justification of killing fox.

economic gains may

term environmental

Discipline Area Language Arts

Subject Dramatization & Discussion

Conservation

Problem Orientation of Resources Grade 3

OBJECTIVES

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

A. Classroom

1. Read poem, Hunting Song
by Donald Finkel to class.
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stanza feels.
3. Discussion of why the
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4. Discuss whether this is a
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what could happen if too
many fox are killed.
5. The children will form into
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in which the characters are
animals & hunters.
6. Children will give their
viewpoints on hunter's
justification of killing
fox.

II. Outside Resource and
Community Activities

ence Materials	Continued and Additional Suggested Learning Experiences
<p>Donald Finkel</p>	<p>Continued and Additional Suggested Learning Experiences</p>

C 11. Individual acts, duplicated,
 O
 N or compounded, produce significant
 C
 E environmental alterations over time.
 P
 T

Discipline Area Language

Subject Language

Problem Orientation Land

ESEA Title III - 59-70-0135-1 Project I-C-E

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING EXPERIENCES

Cognitive: The students will
 examine a cubic foot of
 earth, listing their
 findings. When changes
 are made, students will
 record these changes, and
 will report the results of
 these changes.
Affective: The children
 will respond to the
 question of--What could
 we do to improve our
 school to make it a more
 enjoyable place?

I. Student-Centered in class
 activity

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Skills to be Learned
 Making comparisons
 Keener awareness and use
 of the senses

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4

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d, produce significant

l alterations over time.

Discipline Area Language Arts

Subject Language

Problem Orientation Land Use

Grade 3

OBJECTIVES

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

II. Outside Resource and
Community Activities

1. Examine the various levels
the earth: color, texture,
density, smell.
2. Using senses -
 - a. Describe the smell of
the earth
 - b. What words would you
use to tell how the earth
feels?
 - c. Do some parts feel
differently?
 - d. How many colors do you
see?
 - e. Look for signs of life.
 - f. Listen as you rub the
earth between your hands.
Can you describe the
sound?
3. In what ways can we change
the earth?
 - a. Add water to it
 - b. Add fertilizer
 - c. Plant something in it
 - d. Let it dry out in the
sun
 - e. Heat it in an oven
4. Try some of the above
ideas with the earth. Plant
the same kind of seed (corn)
(cont.)

Resource and Reference Materials

Publications:

Science in Your Own Back Yard,

Cooper, E. K., New York City,
New York. Harcourt, Brace, and
Company., 1958

Classroom Out-of-Doors, Schramm,
Wilbur, Sequoia Press, 1969.

A Handful of Soil, Simon, Seymour,
Hawthorne Books. 70 Fifth Avenue,
New York, New York 10011.
\$3.95

Audio-Visual:

Community:

Continued and Additional Suggested Le

II. cont.

in foam cups and give each the same
Keep some of the plants away from
some in the window.

5. Report findings and draw conclusions.

Materials	Continued and Additional Suggested Learning Experiences
<p> k Yard, k City, ace, and Schramm, 1969. n, Seymour, th Avenue, 011. </p>	<p> II. cont. in foam cups and give each the same amount of water. Keep some of the plants away from direct light, and some in the window. 5. Report findings and draw conclusions. </p>

C 12. Private ownership must be
 O
 N regarded as a stewardship and
 C
 E should not encroach upon or violate
 P
 T the individual right of others.

Discipline Area Langu
 Subject Oral
 Problem Orientation of Co

BEHAVIORAL OBJECTIVES

Cognitive: Children will list 5 measures & situations where private ownership must involve private stewardship.
Affective: A child shows by his behavior that he regards private ownership as a stewardship & should not encroach upon or violate the individual rights of others.

Skills to be Learned

Listening
 Reasoning
 Discussion
 Critical thinking

SUGGESTED LEARNING

- I. Student-Centered in class activity
 - A. Classroom
 1. Before class begins, the teacher will distribute her possessions around the room - on desks, under & near desks. She hopes the children will return them.
 2. Discussion of what has just happened. Ask if it was right for me as a teacher to leave my things about. Why? (Someone else had to pick them up, they were in people's way. She was just causing other people to do unnecessary work.
 3. Have students list things which they should do to show they take care of their possessions & do not cause other people to suffer.
 4. Do you like to have your area & freedom to work cluttered up with others' possessions? or your space used by someone else's belongings?

ownership must be
 stewardship and
 encroach upon or violate
 the right of others.

Discipline Area Language Arts
 Subject Oral Expression
Conservation
 Problem Orientation of Resources Grade 3

OBJECTIVES

Children will
 & situations
 ownership
 private steward-
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 child shows by
 that he regards
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 should not
 or violate the
 rights of others.

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
 activity

A. Classroom

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II. Outside Resource and
 Community Activities

Resource and Reference Materials
Publications:

Continued and Additional Sug

Audio-Visual:

Community:

e Materials

Continued and Additional Suggested Learning Experiences

PROJECT I-C-E

Episode Evaluation Form (Reproduce or duplicate as needed)

In commenting on each episode used in your class, you may wish to use this format. Please feel free to adapt it and add more pages. Let us know your comments - negative and positive.

I. Behavioral Objectives

A. Cognitive:

B. Affective:

II. Skills Developed

III. Suggested Learning Experiences

A. In Class:

B. Outside & Community Activities:

IV. Suggested Resource & Reference Materials (specific suggestions & comments)

PROJECT I-C-E

Episode Evaluation Form (Reproduce or duplicate as needed)

Working on each episode used in your class, you may wish to duplicate this suggested form. Please feel free to adapt it and add more pages. Let us know all your critiques and feedback, both negative and positive.

Overall Objectives
Achieved:

Objective:

Developed

Student Learning Experiences
Class:

Outside & Community Activities:

Additional Resource & Reference Materials
(for suggestions & comments)

Project I - C - E

INSTRUCTION - CURRICULUM - ENVIRONMENT

ED055919

A SUPPLEMENTARY PROGRAM FOR ENVIRONMENTAL EDUCATION

DISCIPLINE AREA Language Arts GRADE 4

Produced under Title III E.S.E.A.
PROJECT I-C-E
Serving Schools in CESA's 3-8-9
1927 Main Street
Green Bay, Wisconsin 54301
(414) 432-4338

Robert Warpinski
Robert Kellner,
George Howlett,

INSTRUCTION - CURRICULUM - ENVIRONMENT

PROGRAM FOR ENVIRONMENTAL EDUCATION

Language Arts GRADE 4

III E.S.E.A.

ESA's 3-8-9

54301

Robert Warpinski, Director
Robert Kellner, Asst. Director
George Howlett, EE Specialist

PREFACE

If you wish to excite students about their environment, help is read of over a hundred teachers, year long meetings, a summer workshop, uni ecologists, this guide means realistic, developed aid for you. Please which have directed teachers in writing and editing this guide.

1. This guide is supplementary in nature and the episodes are designed ces--to plug into existing, logical course content.
2. Each page or episode offers suggestions. Since you know your stude to adapt, adopt, or use. By design, the range of suggestions is wid mentation and usage are even wider. Many episodes are self-containe others can be changed in part or developed more keenly over a few w possibilities allow you to explore.
3. Now we urge that you try the episodes and suggested learning experi plan. The reasons are simple. No guide has all the answers and no unless viewed in the context of your classroom situation. Thus, be give it a triple reading, check over the resources listed, make men prime your students, and seek help. The Project personnel and teach knowledge page stand ready to aid your efforts. Feel free to ask
4. The Project Resource Materials Center serves all CESA 3, 8, and 9 a private. We will send available materials pre-paid. Call for any visit. Phone 432-4338.
5. Check often the Project ICE Bibliography in your school library for Center materials. Please offer suggestions, comments, or advice--a service may grow. Let's help each other.
6. Involve yourself with the guide by reacting to it with scratch ideas suggestions on the episode pages or use the attached evaluation form lected in late May next year and will be used in our revisions. We s reactions and suggestions--negative and positive. Please note that s in the episodes may refer to specific, local community resources or cases, individual school districts and teachers will have to adopt I stitutes. A list of terms pertinent to the episodes is below.
7. Ecologists and other experts have simplified the issue--survival--v Creation's beauty and complexity--often noted as the work of a geni and human energy to save. A year's work by a hundred of your fellow gesture. Without you, their work will crumble, and so might we all-- let us live to think, feel, and act in harmony with our world.

- Edi
1. Cognitive means a measurable mental skill, ability, or process ba
 2. Affective refers to student attitudes, values, and feelings.
 3. APWI means Acceptable Performance Will Include (labels a cognitiv
 4. EPA - Environmental Problem Area.

PREFACE

students about their environment, help is ready. Thanks to the efforts of year long meetings, a summer workshop, university consultants and means realistic, developed aid for you. Please note the following ideas for teachers in writing and editing this guide.

Elementary in nature and the episodes are designed--at appropriate instances--for existing, logical course content.

The guide offers suggestions. Since you know your students best, you decide what to use. By design, the range of suggestions is wide; your chances for experimentation are even wider. Many episodes are self-contained, others open-ended, still others in part or developed more keenly over a few weeks. These built-in episodes are yours to explore.

Try the episodes and suggested learning experiences but please pre-plan. No guide has all the answers and no curriculum will work in the context of your classroom situation. Thus, before trying an episode, check over the resources listed, make mental and actual notes, and seek help. The Project personnel and teachers listed on the acknowledgment are ready to aid your efforts. Feel free to ask their help in pre-planning. The Materials Center serves all CESA 3, 8, and 9 area schools--public and private--and available materials pre-paid. Call for any help, materials, or to 38.

Check ICE Bibliography in your school library for available Resource Center. Please offer suggestions, comments, or advice--at any time--so that this project's help each other.

In the guide by reacting to it with scratch ideas, notes, and extended episode pages or use the attached evaluation format, which will be collected next year and will be used in our revisions. We sincerely want your reactions--negative and positive. Please note that some resources listed refer to specific, local community resources or conditions. In such school districts and teachers will have to adopt local or available substitutes. Terms pertinent to the episodes is below.

Experts have simplified the issue--survival--yours, mine, our students, and complexity--often noted as the work of a genius--will take our genius away. A year's work by a hundred of your fellow teachers is a saving grace, their work will crumble, and so might we all--literally. Instead, feel, and act in harmony with our world.

Editorial Board

Measurable mental skill, ability, or process based on factual data.
No student attitudes, values, and feelings.
Measurable Performance Will Include (labels a cognitive or mental performance.)
1 Problem Area.

ACKNOWLEDGEMENTS: The following teachers and consultants participated
of the Supplementary Environmental Education Guide:

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Lowell Baltz, Weyauwega
William Behring, Lourdes
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Marie Below, Clintonville
William Bohne, Kimberly
Bob Church, Little Chute
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Roy Lukes, Gibraltar
Sister Anna, St. Philips
Jim Maki, Sturgeon Bay
Joyce Mateju, Algoma
Richard Minten, W. DePere
Gloria Morgan, Linsmeier Private
George Pederson, Southern Door
Alan Schuh, Pulaski
Thomas Weyers, Cathedral
Ruth Windmuller, Green Bay
James Wiza, DePere
John Torgerson, Kewaunee
Benjamin Roloff, Howard-Suamico
Greg Schmitt, Cathedral
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David Bartz, Sturgeon Bay
John Hussey, Green Bay
Sister Barbara, St. Bernard

nette
W-Marinette

Ednajean Purcell, CSU
David West, Lawrence U.

Robert Cook, UWGB
Dennis Bryan, UWGB

C 1. Energy from the sun, the basic source

O

N of all energy, is converted through

Discipline Area _____ I

C

E plant photosynthesis into a form all

Subject _____ I

P

T living things can use for life pro-
cesses.

Problem Orientation _____ E

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING

Cognitive: The students will be able to point out how life depends on the sun by listing ways, dramatizing poems, creative writing of poems, and choral reading.

Affective: The children will praise the sun as a basic source of energy - even through poetry.

Skills to be Learned

Dramatizing
Listing
Creative writing
Discussion
Using library resources
Choral reading
Analysis

I. Student-Centered in class activity

1. Children will bring poems to class concerning the sun.

2. As individual poems are read, each student will jot down ways in which life depends on the sun.

3. Discussion will follow of the ways in which life depends on the sun after each poem or after all poems are read.

4. The children can use the poem on back for choral reading using light, medium, and dark voices.

5. The children can form into groups, each group choosing a poem to dramatize putting emphasis on how the sun helps us.

6. The children can write short poems telling about the energy of the sun; e.g.:

I wait for the sun each morn,

When each new day is born,

To see each lovely thing.

What new life it will bring.

from the sun, the basic source

gy, is converted through

Discipline Area

Language Arts

synthesis into a form all

Subject

Language Arts

gs can use for life pro-
cesses.

Problem Orientation

Energy

Grade

4

AL OBJECTIVES

SUGGESTED LEARNING EXPERIENCES

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I. Student-Centered in class
activity

1. Children will bring poems
to class concerning the sun.

2. As individual poems are
read, each student will jot
down ways in which life de-
pends on the sun.

3. Discussion will follow of
the ways in which life de-
pends on the sun after each
poem or after all poems are
read.

4. The children can use the
poem on back for choral
reading using light,
medium, and dark voices.

5. The children can form
into groups, each group
choosing a poem to drama-
tize putting emphasis on
how the sun helps us.

6. The children can write
short poems telling
about the energy of the
sun; e.g.:
I wait for the sun each
morn,
When each new day is
born,
To see each lovely thing,
What new life it will bring.

II. Outside Reso ace and
Community Activities

Resource and Reference Materials	Continued and Additional Suggestions
<p><u>Publications:</u> <u>Man (In a Poetic Mode)</u> McDongal, Littell & Co. <u>Poems:</u> <u>On A Sunny Evening</u> - Anonymous <u>Children</u> <u>Song for the Sun that Disappeared</u> <u>Behind the Rainclouds</u>, Primitive African Trans. Ullibeier.</p> <p><u>Audio-Visual:</u></p> <p><u>Community:</u></p>	<p>Song for the Sun That Disappeared</p> <p>The fire darkens, the wood The flame extinguishes, the God sets out in search of The rainbow sparkles in her the bow of the divine hunter He has heard the lamentation He walks along the milky</p> <p>With quick arms he piles piles them up with quick like a woman who collects and piles them into her until the pot overflows until the basket overflows</p>
	<p>Primitive African (Homer) Translated by Ulli B.</p>

Source Materials	Continued and Additional Suggested Learning Experiences
<p>Co.</p> <p>Anonymous</p> <p>at Disappeared uds, Primitive libeier.</p>	<p>Song for the Sun That Disappeared Behind the Rainclouds</p> <p> The fire darkens, the wood turns black. The flame extinguishes, misfortune upon us. God sets out in search of the sun. The rainbow sparkles in his hand, the bow of the divine hunter. He has heard the lamentations of his children. He walks along the milky way, he collects the stars. </p> <p> With quick arms he piles them into a basket, piles them up with quick arms like a woman who collects lizards and piles them into her pot, piles them up until the pot overflows with lizards until the basket overflows with light. </p> <p> Primitive African (Hottentot) Translated by Ulli Beier </p>

C 2. All living organisms interact among
 O
 N themselves and their environment,
 C
 E forming an intricate unit called
 P
 T an ecosystem.

Discipline Area _____ Langu
 Subject _____ Engli
 Problem Orientation _____ Ecosy

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXP	
<p><u>Cognitive:</u> Each child will write an imaginative story of one day in the life of a plant or animal observed in the patch or clump of earth.</p> <p><u>Affective:</u> They will learn to enjoy nature as it is without man.</p>	<p>I. Student-Centered in class activities</p> <p>1. Read poem "The Worm" or similar poem about small creatures. Children put themselves in role of creature in poem & act out what might happen to it during one day.</p> <p>2. Write stories - children take part of any plant or animal found in study and write about - My Day in a Clump of Grass.</p>	<p>II. O Co</p>
<p><u>Skills to be Learned</u></p> <p>Using descriptive language</p> <p>Sentence structure</p> <p>Paragraphing</p> <p>Imagination</p> <p>Using card catalog</p>		

isms interact among

r environment,

Discipline Area Language Arts

e unit called

Subject English

Problem Orientation Ecosystem Grade 4

TIVES

SUGGESTED LEARNING EXPERIENCES

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I. Student-Centered in class activities
1. Read poem "The Worm" or similar poem about small creatures. Children put themselves in role of creature in poem & act out what might happen to it during one day.
2. Write stories - children take part of any plant or animal found in study and write about - My Day in a Clump of Grass.

nguage

II. Outside Resource and Community Activities

Resource and Reference Materials	Continued and Additional Su.
<p><u>Publications:</u></p> <p><u>Books:</u></p> <p><u>Concepts in Science 4 p. 135-73</u> <u>and p. 175-209.</u></p> <p><u>Under a Tree by Elizabeth Madox</u> <u>Roberts - Viking Press.</u></p> <p><u>Our Living World of Nature by</u> <u>McGraw-Hill Book Co.</u></p> <p><u>The Life of the Cave</u></p> <p><u>The Life of the Ocean</u></p> <p><u>The Life of the Marsh</u></p> <p><u>The Life of Rivers & Streams</u></p> <p><u>The Life of the Pond</u></p> <p><u>The Life of the Seashore</u></p> <p><u>The Life of the Desert</u></p> <p><u>The Life of the Mountains</u></p> <p><u>The Life of the Prairies & Plains</u></p> <p><u>Margaret Waring Buck, Abingdon</u></p> <p><u>In Woods & Fields</u></p> <p><u>In Ponds & Streams</u></p> <p><u>Audio-Visual:</u></p> <p><u>String & stakes or shovels</u></p> <p><u>Several reading glasses</u></p> <p><u>Plastic bags or wide-mouth</u></p> <p><u>glass jars for carrying earth</u> <u>samples</u></p> <p><u>Movie projector</u></p> <p><u>Film:</u></p> <p><u>Life in a Cubic Foot of Soil</u> <u>BAVI 5677 - 11 min.</u></p> <p><u>Community:</u></p>	

Materials	Continued and Additional Suggested Learning Experiences
p. 135-73	
eth Madox s. ture by	
n h Streams	
shore rt ntains ries & Plains Abingdon	
vels s outh ng earth	
of Soil	

C Environmental factors are limiting

O

N on the numbers of organisms living

C

E within their influence, thus, each

P

T environment has a carrying capacity.

Discipline Area

Language

Subject

Language

Population

(3) Problem Orientation

Density

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING EXPERIENCES

Cognitive: List 5 ways that the classroom becomes too crowded & uncomfortable for good learning.
(Ex,- poor air, noise, nearness, no room for walking, no room for experiments, teacher can't find time to talk to students.
Affective: Defend the idea that all plants, animals & people can become too many for a given area and this causes a lack of quality.

I. Student-Centered in class activity

II. Out of class activity

1. Teacher asks, "What would happen if our principal said we needed to have 18 more students put into our rather small classroom?"

Discussion:

- Conditions for learning
 - Conditions for activities
 - Conditions for noise
- Take notes.

Skills to be Learned

Concentration of a concept
Making observations
Taking notes
Reporting (objective description)

Factors are limiting

organisms living

fluence, thus, each

carrying capacity. (3) Problem Orientation

Discipline Area Language Arts

Subject

Language Arts

Population

Density

Grade 4

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
ways becomes comfortable se, near, alking, ents, time to the s, an be- a given es a	<p>I. Student-Centered in class activity</p> <p>1. Teacher asks, "What would happen if our principal said we needed to have 18 more students put into our rather small classroom?"</p> <p>Discussion:</p> <p>a. Conditions for learning</p> <p>b. Conditions for activities</p> <p>c. Conditions for noise</p> <p>Take notes.</p>	<p>II. Outside Resource and Community Activities</p>
ed a ns ive		

Resource and Reference Materials
Publications:

Continued and Additional Suggested Le

Audio-Visual:

Community:

Materials	Continued and Additional Suggested Learning Experiences

C 4. An adequate supply of pure
 O
 N water is essential for life.
 C
 E
 P
 T

Discipline Area _____ Lang _____
 Subject _____ Engl _____
 Adeq _____
 Problem Orientation _____ Wate _____

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
<p>Cognitive: The child will show that he understands the water cycle by writing an imaginative story about a water molecule.</p> <p>Affective: The student will read a favorite poem about water to the class.</p>	<p>I. Student-Centered in class activity</p> <ol style="list-style-type: none"> 1. Read aloud poems to contrast moods. 2. Interpret through pantomime and creative dance the moods of music and poems (especially those starred). Children become raindrops, ocean waves, snowflakes, plants, animals, etc. 3. Dramatize the water cycle incorporating feeling & moods from poems & music with facts from science or social studies-include polluting agents into dramatization. 4. Write imaginative story "The Travels of the Water Molecule." 	<p>II. _____</p> <p>C</p>
<p><u>Skills to be Learned</u></p> <p>Interpreting poetry and music</p> <p>Reacting physically to poetry and music</p> <p>Creative writing</p>		

uate supply of pure

essential for life.

Discipline Area Language Arts

Subject English
Language Arts

Problem Orientation Water Supply Grade 4

AL OBJECTIVES

The child will understand the water cycle by writing a poem about the water cycle.
The student will read a favorite poem to the class.

Learned
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iting

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. Read aloud poems to contrast moods.
2. Interpret through pantomime and creative dance the moods of music and poems (especially those starred). Children become raindrops, ocean waves, snowflakes, plants, animals, etc.
3. Dramatize the water cycle incorporating feeling & moods from poems & music with facts from science or social studies-include polluting agents into dramatization.
4. Write imaginative story "The Travels of the Water Molecule."

II. Outside Resource and Community Activities

Resource and Reference Materials Publications:	Continued and Additional Suggested
<p>Books:</p> <p><u>Wind Song</u> by Carl Sandburg p. 23 <u>Sea Wisdom</u>, Harcourt, Brace, & World p. 63 <u>Niagara</u>, p. 106* <u>Summer Grass</u> <u>Let Freedom Ring</u>, Hallmark Cards <u>Navajo Chant</u>. <u>Little Hills</u> - Sam Bryan, p. 51 <u>Tap Roots & Tips</u>, Wells Printing Co., Madison. <u>The Poems of Robert Frost</u>, p. 263 <u>Spring Fools</u>, Random House. <u>Miracles</u> by Richard Lewis, p. 56 <u>Rain</u>; Simon & Schuster.</p> <p>AAudio-Visual:</p> <p>Record:</p> <p><u>La Mer</u>; Debussy.</p>	

ence Materials

Continued and Additional Suggested Learning Experiences

Sandburg
Harcourt,
63
Summer Grass
Hallmark Cards

Bryan, p. 51
Wells Printing

Frost, p. 263
om House.
Lewis,
& Schuster.

C 4. An adequate supply of pure
O
N water is essential for life.
C
E
P
T

Discipline Area _____ Language A
Subject _____ English
Problem Orientation _____ Adequate
Water Supp

ESEA Title III - 59-70-0135-1 Project I-C-E

BEHAVIORAL OBJECTIVES

Cognitive: Each child will write a letter, in correct form, either requesting permission to visit plant or thanking people who conducted tour and each child will write a report or make a poster or chart recording information gained.
Affective: The child will be able to organize information about adequate water supply.

Skills to be Learned

Correct letter form
Notetaking
Summarizing
Sentence structure
Paragraphing
Spelling

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
 1. Write letters to water plant and/or sewage disposal plant requesting permission to visit-use text for correct form.
 2. Discuss how to take notes.
 3. Write reports of field trips for school paper, newspaper, children's own writing notebooks, bulletin board, office, reports to P.T.A. etc. Or, Make posters and charts showing how water is obtained & distributed & how sewage is collected, treated & disposed of.
 4. Write thank-you notes.
 5. Read poem "The Tide River" about pollution in 19th century.

- II. Outside
Communit
1. Field
and/or
Follow

supply of pure

ial for life.

Discipline Area Language Arts

Subject English

Adequate

Problem Orientation Water Supply Grade 4

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
child will n correct esting sit plant e who d each a report or chart ation child orga- about apply.	<p>I. Student-Centered in class activity</p> <ol style="list-style-type: none">1. Write letters to water plant and/or sewage disposal plant requesting permission to visit-use text for correct form.2. Discuss how to take notes.3. Write reports of field trips for school paper, newspaper, children's own writing notebooks, bulletin board, office, reports to P.T.A. etc. Or, Make posters and charts showing how water is obtained & distributed & how sewage is collected, treated & disposed of.4. Write thank-you notes.5. Read poem "The Tide River" about pollution in 19th century.	<p>II. Outside Resource and Community Activities</p> <ol style="list-style-type: none">1. Field trip to water plant and/or sewage disposal plant. Follow with discussion.
rned orm ure		

Resource and Reference Materials	Continued and Additional Suggestions
<p><u>Publications:</u></p> <p><u>Books:</u></p> <p><u>Concepts in Science, Book 4,</u> p. 61-94, Harcourt, Brace, & World.</p> <p><u>The Social Sciences-Concepts &</u> <u>Values 4 - p. 86-94. Harcourt,</u> Brace & World.</p> <p><u>Our Language Today 4 - p. 219-</u> 230. p. 87-99. American Book Company.</p> <p><u>Poem:</u></p> <p><u>"The Tide River" Charles</u> <u>Kingsley. Illustrated Treasury</u> <u>of Poetry for Children. David</u> Ross - Grosset & Dunlap.</p> <p><u>Audio-Visual:</u></p> <p>Large sheets of cardboard</p> <p><u>Community:</u></p>	

Materials	Continued and Additional Suggested Learning Experiences
<p>ook 4, race, &</p> <p>ncepts & Harcourt,</p> <p>p. 219- an Book</p> <p>es Treasury</p> <p>n. David ap.</p> <p>rd</p>	

ESEA Title III - 59-70-0135-1 Project I-C-E

C 5. An adequate supply of clean air is
O
N essential because most organisms
C
E depend on oxygen, through respiration,
P
T to release the energy in their food.

Discipline Area Language Ar
Subject Language Ar
Problem Orientation Clean Ai

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPER	
<p><u>Cognitive:</u> Each child give a 1/2 minute pantomime on how the object gets air. <u>Affective:</u> The teacher will stimulate a conversation about how air is used by other things including plants, animals & machines. The students will volunteer to research for answers to above.</p>	I. Student-Centered in class activity	II. Cu Com A. p a c m B. t t i
<p><u>Skills to be Learned</u> Dramatize Linking action & thought-through imagination</p>		

supply of clean air is

se most organisms

Discipline Area Language Arts

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Subject Language Arts

energy in their food.

Problem Orientation Clean Air Grade 4

OBJECTIVES

child give
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machines.
volunteer
answers

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

II. Outside Resource and
Community Activities

- A. Each child brings a
picture of a plant,
animal or machine (ex-
cluding people) which
need air.
- B. Discuss how all these
things use our air-is
the air now as clean as
it was before its use.

ned

Resource and Reference Materials
Publications:

Continued and Additional Suggeste

Audio-Visual:

Pictures or objects such
as (toy cars, trains, fish, etc.)

Community:

rials

Continued and Additional Suggested Learning Experiences

etc.)

C 6. Natural resources are not equally

O

N distributed over the earth or over

C

E time and greatly affect the geographic

P

T conditions and quality of life.

Discipline Area

Language

Subject

Language

Problem Orientation Resource

BEHAVIORAL OBJECTIVES

Cognitive: Student will answer factual questions on the resources of his choice.
Affective: Each child will respond to the teacher: Do you think you picked a good resource to show that natural resources are not distributed equally? Why or why not?

Skills to be Learned
Locating and taking notes on a selected item
Standing before class to role-play.

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. Students role-play a natural resource (rain, trees, etc.)

2. Each student chooses one resource.

3. Students ask questions - answered by role-player.

4. Questions ought to be on the availability & quantity left on Earth of their particular resource.

II. Out of class

Community

1. Field trip

to local resource

ESEA Title III - 59-70-0135-1 Project I-C-E

ces are not equally

the earth or over

Discipline Area

Language Arts

affect the geographic

Subject

Language Arts

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Problem Orientation Resource Usage Grade

4

ECTIVES

SUGGESTED LEARNING EXPERIENCES

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- I. Student-Centered in class activity
 1. Students role-play a natural resource (rain, trees, etc.)
 2. Each student chooses one resource.
 3. Students ask questions - answered by role-player.
 4. Questions ought to be on the availability & quantity left on Earth of their particular resource.

- II. Outside Resource and Community Activities
 1. Research of resource in library.

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ng notes
ass to

Resource and Reference Materials
Publications:

Continued and Additional Sugge

Audio-Visual:

Community:

Materials

Continued and Additional Suggested Learning Experiences

C 7. Factors such as facilitating transportation,

O

N economic conditions, population growth, Discipline Area Language A

C

E and increased leisure time have a great Subject

Language A

P

T influence on changes in land use and
centers of population density.

Problem Orientation Leisure

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING EXPER

Cognitive: Children will perform, through pantomime, a clear idea on a leisure time activity. Peers will interpret pantomime & the children should differentiate between harmless and harmful.
Affective: The teacher will provide a list of leisure time activities (play) to be classified into suitabilities for children, young people & adults.

Skills to be Learned
Dramatization
Making judgements

I. Student-Centered in class activity

A. Classroom

1. Teacher will ask the students, "What is leisure time?"
2. How many hours of leisure time do we have during a school day? a week-end? summer time?
3. Children choose a leisure time activity to dramatize.
4. Each activity is listed on the board & class discussion as to whether this activity caused a harmful effect on our environment.
5. Children may classify these leisure time activities into suitabilities for:

	Young Children People Adults		
Reading	x	x	x
Bike riding	x	x	x
Building blocks	x		
Baseball	x	x	x
Singing	x	x	x
Playing dolls	x		
Swimming	x	x	x

ESEA Title III - 59-70-0135-1 Project I-C-E

facilitating transportation,

, population growth, Discipline Area Language Arts

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Language Arts

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Problem Orientation Leisure Time Grade 4

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SUGGESTED LEARNING EXPERIENCES

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I. Student-Centered in class
activity

A. Classroom

1. Teacher will ask the students, "What is leisure time?"
2. How many hours of leisure time do we have during a school day? a week-end? summer time?
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5. Children may classify these leisure time activities into suitabilities for:

	Young		
	Children People Adults		
Reading	X	X	X
Bike			
riding	X	X	X
Building			
blocks	X		
Baseball	X	X	X
Singing	X	X	X
Playing			
dolls	X		
Swimming	X	X	X

II. Outside Resource and
Community Activities

Resource and Reference Materials
Publications:

Continued and Additional Sugges

Audio-Visual:

Community:

nce Materials

Continued and Additional Suggested Learning Experiences

C 3. Cultural, economic, social, and
 O
 N political factors determine status
 C
 E of man's values and attitudes
 P
 T toward his environment.

Discipline Area _____ Language _____
 Subject _____ Language _____
 Problem Orientation _____ Cultural _____
 Attitude _____

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERI
<p><u>Cognitive:</u> Each student will demonstrate his attitude toward his environment through the media of writing poetry.</p> <p><u>Affective:</u> Color in nature enhances our lives. Shall we change this natural color by pollution?</p>	<p>I. Student-Centered in class activity</p> <ol style="list-style-type: none"> 1. Read several poems to children. 2. Discuss the type of person who could write things like this about color. How do you think she feels about her environment. 3. Discuss the senses she should have to use. 4. Depending on the season of year, concentrate on an appropriate color: green or brown, blue, or white, etc. 5. Write a poem telling about the color being emphasized.
<p><u>Skills to be Learned</u></p> <p>Observation</p> <p>Writing poetry</p>	<p>II. Outs</p> <p>Comm</p> <ol style="list-style-type: none"> 1. Ch book and color reaso taste from 2. Lib a. Re b. Do

economic, social, and
factors determine status
values and attitudes
environment.

Discipline Area Language Arts
Subject Language Arts
Cultural
Problem Orientation Attitudes Grade 4

LEARNING OBJECTIVES

Each student
state his atti-
tudes environ-
the media of
color in nature
lives. Shall
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SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
 1. Read several poems to children.
 2. Discuss the type of person who could write things like this about color. How do you think she feels about her environment.
 3. Discuss the senses she should have to use.
 4. Depending on the season of year, concentrate on an appropriate color: green or brown, blue, or white, etc.
 5. Write a poem telling about the color being emphasized.

- II. Outside Resource and Community Activities
 1. Children, armed with notebooks and a pencil, go outside and look for things that color, touch and collect if reasonable. Smell, perhaps taste. Do you hear anything from that color?
 2. Library:
 - a. Read additional poems
 - b. Do research on Mary O'Neill.

Resource and Reference Materials

Continued and Additional Suggested Learning

Publications:

Hailstones and Halibut Bones,
Mary O'Neill, Doubleday & Co., Inc.,
Garden City, N.Y., 1961.

Audio-Visual:

Recordings of poems and nature
sounds to set up "walk"
experience.

Community:

State Historical Society
other sources of nature poems

Materials	Continued and Additional Suggested Learning Experiences
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C 8. Cultural, economic, social, and
 O
 N political factors determine status
 C
 E of man's values and attitudes
 P
 T toward his environment.

Discipline Area _____ La

Subject _____ La

Problem Orientation _____ At

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING

Cognitive: Through writing poetry and copying other poet's poetry about nature, man's values and attitudes toward his environment become more concrete.
Affective: We can praise our surroundings through the poetic words of others and ourselves.

- | | |
|--|-----|
| I. Student-Centered in class activity | II. |
| 1. Introduce pupils to the idea of what an anthology of poems is by having them select poems which they enjoyed. Explain what anthology means. | |
| 2. Pupils read favorite poems to class. | |

Skills to be Learned

Reading poetry
 Writing poetry
 Listening to poetry

economic, social, and
 factors determine status
 values and attitudes
 environment.

Discipline Area Language Arts
 Subject Language Arts
Cultural
 Problem Orientation Attitudes Grade 4

OBJECTIVES

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 and attitudes
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earned

poetry

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
 1. Introduce pupils to the idea of what an anthology of poems is by having them select poems which they enjoyed. Explain what anthology means.
 2. Pupils read favorite poems to class.

- II. Outside Resource and Community Activities
 1. Library
 - a. Divide class into groups to locate in library categories of poems dealing with nature. Categorize poems into "Animals," "Trees," "Flowers," etc.
 - b. Pupils add own poems to copied poems to assemble booklet with their own paintings, printing and cover.
 - c. Invite other classes to hear poems and see booklets.
 - d. Booklets could be given to shut-ins.

Resource and Reference Materials

Continued and Additional Suggested Learning

Publications:

Children's Anthology.

Poetry by following writers:

Eugene Field

Robert Louis Stevenson

Henry Longfellow

James Kiley

The MacMillan English Series 4,
MacMillan Co., 1969.

Audio-Visual:

Community:

Materials	Continued and Additional Suggested Learning Experiences
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C 10. Short-term economic gains may
 O
 N produce long-term environmental
 C
 E losses.
 P
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Discipline Area Langu
 Subject Langu
 Problem Orientation L

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING
<p><u>Cognitive:</u> After examining the waste paper collection of the classroom or school, the class will prepare a tape, slide or picture presentation of the amount of paper used.</p> <p><u>Affective:</u> Students will in some way of their own choice, attempt to improve the manner in which they & their peers can conserve natural resources.</p>	<p>I. Student-Centered in class activity</p> <p>A. Classroom</p> <ol style="list-style-type: none"> 1. There is a rule of thumb after quoted: 19 trees produce a ton of paper. Have student think in terms of 1 tree producing 200 lbs. of paper. 2. Weight the amount of used paper discarded in the class or entire school if possible each day for a week or more 3. Equate this to the number of trees it required to make this paper. 4. Break into small groups to discuss the ways this situation can be improved. What can they do about it? 5. Then discuss how they can convince their classmates of the need & the way for the wise use of paper. Possibilities: <ol style="list-style-type: none"> a. Panel discussion b. Prepare slides & a talk c. Prepare slides accompanied by a student prepared tape d. Make posters e. Make a large tree, animal <p>Use children's voices live taped for the talking tree</p>
<p><u>Skills to be Learned</u></p> <p>Group discussion Preparation of slides Prepare a talk Interview</p>	

term economic gains may

g-term environmental

Discipline Area Language Arts

Subject Language

Problem Orientation Land Use Grade 4

RAL OBJECTIVES

After examining
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room or school,
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Students will
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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

A. Classroom

1. There is a rule of thumb
after quoted: 19 trees
produce a ton of paper.
Have student think in
terms of 1 tree producing
200 lbs. of paper.
2. Weight the amount of used
paper discarded in the class
or entire school if possible
each day for a week or more.
3. Equate this to the number
of trees it required to
make this paper.
4. Break into small groups to
discuss the ways this situation
can be improved. What can they
do about it?
5. Then discuss how they can
convince their classmates of
the need & the way for the
wise use of paper. Possibilities:
 - a. Panel discussion
 - b. Prepare slides & a talk
 - c. Prepare slides accompanied by
a student prepared tape
 - d. Make posters
 - e. Make a large tree, animate.
Use children's voices live or
taped for the talking tree.

II. Outside Resource and Community Activities

A. Teacher

1. Measure their
attempt to change
the behavior of
their peers.
2. For another week
or more, weigh
the amount of
scrap paper.
3. Interview other
teachers to find
out if they can
notice a conscious
attempt on the
part of students
to use paper
wisely.

Resource and Reference Materials
Publications:

Continued and Additional Suggested Learning

Audio-Visual:

Community:

Serials

Continued and Additional Suggested Learning Experiences

C 11. Individual acts, duplicated
O
N or compounded, produce significant
C
E environmental alterations over time.
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Discipline Area Language
Subject Descript
Problem Orientation Land

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING EX

Cognitive: Children will write two (or more) descriptive paragraphs - at least one factual and one imaginative - showing changes in environment affected by man.
Affective: The child will choose something which has been changed since white man came to Wisconsin. He will offer reasons why this is good or bad.

Skills to be Learned
Writing of descriptions
Writing of paragraphs
Observations
Making comparisons
Expressing reactions or feelings clearly
Sentence structure
Spelling

- I. Student-Centered in class activity
 1. Use language texts- sections on writing descriptions-factual and imaginative and writing paragraphs.
 2. Using social studies texts, books about Wisconsin history, Wisconsin magazines, etc., to find out what Wisconsin was like before white men arrived.
 3. Write then and now descriptive paragraphs showing how man has affected his environment in Wisconsin.
 - a. Factual paragraph
 - b. Imaginative paragraph
 4. Observe one thing observed on field trip or from children's previous experience and describe it in a descriptive paragraph.
 - a. Factually
 - b. Imaginatively-expressing personal feeling or reaction to thing observed.

II. Ou
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ual acts, duplicated

ed, produce significant

cal alterations over time.

Discipline Area Language Arts

Subject Descriptive Writing

Problem Orientation Land Use Grade 4

GENERAL OBJECTIVES

Children will
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paragraphs - at
actual and one
- showing
environment
man.
The child
something
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Learned
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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

1. Use language texts-
sections on writing des-
criptions-factual and
imaginative and writing
paragraphs.
2. Using social studies
texts, books about Wis-
consin history, Wisconsin
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out what Wisconsin was like
before white men arrived.
3. Write then and now des-
criptive paragraphs show-
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his environment in Wiscon-
sin.
 - a. Factual paragraph
 - b. Imaginative paragraph
4. Observe one thing observed
on field trip or from
children's previous exper-
ience and describe it in a
descriptive paragraph.
 - a. Factually
 - b. Imaginatively-expressing
personal feeling or re-
action to thing observed.

II. Outside Resource and
Community Activities

1. Field trip to observe
things in our environment
which makes it more
beautiful and/or uglier.
Keep notes and/or take
pictures.

Resource and Reference Materials

Publications:

Language textbook:

Our Language Today -4, pp. 168-174,
American Book Company

Books about Wisconsin:

Exploring Wisconsin, Follett
Publishing Co., 1967.

The Enchantment of America-

Wisconsin, Children's Press, 1964.

Badger Tales, Lyons & Cornahan, 1940.

Magazines about Wisconsin:

Badger History

Wisconsin Tales and Trails

Audio-Visual:

Pictures of Wisconsin before
coming of white man.

Pictures of present day
Wisconsin.

Wisconsin travel brochures

Camera and film

Community:

Continued and Additional Suggested Learning

Materials

Continued and Additional Suggested Learning Experiences

p. 168-174,

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C 12. Private ownership must be

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N regarded as a stewardship and

C

E should not encroach upon or violate

P

T the individual right of others.

Discipline Area Language Arts

Subject

English

Conservat

Problem Orientation of Resources

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING EXPERIENCES

Cognitive: Each child will express his opinions about industrialized neighborhood situations in a letter written in correct form to editor, business or Congressman.

Affective: Each child will choose an area the class visited or another one he prefers & list the misuse or the good use of the natural resources.

Skills to be Learned

Observation

Analyzing

Correct letter form

Expressing ideas & feelings in clear

Courteous language

I. Student-Centered in class activity

II. Outside Community

A. Outside

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ESEA Title III - 59-70-0135-1 Project I-C-E

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Discipline Area Language Arts

Subject English

Conservation

Problem Orientation of Resources Grade 4

OBJECTIVES

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

II. Outside Resource and
Community Activities

A. Outside classroom

1. Field trip to study an industrialized neighborhood for signs of pollution or misuse of natural resources.
2. Class discussions on findings & possible reasons for them.
3. Write letters to editor explaining what was found & child's reaction to it.
4. Write letters to companies explaining what was found & asking them what is being done about it.
5. Write letters to State Congressmen for any information on State pending bills concerned with situation discovered.

Resource and Reference Materials	Continued and Additional Sugge
<p><u>Publications:</u></p> <p>Language textbook - Unit on correct letter form</p> <p>Science and/or social studies text -</p> <p>How man has changed environment</p> <p><u>Audio-Visual:</u></p> <p>List of name & addresses of newspapers, businesses concerned, Congressmen, etc.</p> <p><u>Community:</u></p> <p>Local business leader</p> <p>Farmer</p> <p>City official</p> <p>These can all be interviewed by students or they can give a talk to the class</p>	

Materials

Continued and Additional Suggested Learning Experiences

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PROJECT I-C-E

Episode Evaluation Form
(Reproduce or duplicate as needed)

In commenting on each episode used in your class, you may use the following format. Please feel free to adapt it and add more pages. comments - negative and positive.

I. Behavioral Objectives

A. Cognitive:

B. Affective:

II. Skills Developed

III. Suggested Learning Experiences

A. In Class:

B. Outside & Community Activities

IV. Suggested Resource & Reference Materials (specific suggestions & comments)

PROJECT I-C-E

Episode Evaluation Form (Reproduce or duplicate as needed)

on each episode used in your class, you may wish to duplicate this suggested feel free to adapt it and add more pages. Let us know all your critiques and ive and positive.

Objectives
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& Community Activities

resource & Reference Materials
uggestions & comments)

Project I - C - E

INSTRUCTION - CURRICULUM - ENVIRONMENT

ED055919

A SUPPLEMENTARY PROGRAM FOR ENVIRONMENTAL EDUCATION

DISCIPLINE AREA Language Arts GRADE 5

Produced under Title III E.S.E.A.
PROJECT I-C-E
Serving Schools in CESA's 3-8-9
1927 Main Street
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Robert Warp
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- E

INSTRUCTION - CURRICULUM - ENVIRONMENT

PROGRAM FOR ENVIRONMENTAL EDUCATION

Language Arts GRADE 5

Title III E.S.E.A.

in CESA's 3-8-9

t
onsin 54301

Robert Warpinski, Director
Robert Kellner, Asst. Director
George Howlett, EE Specialist

PREFACE

If you wish to excite students about their environment, help is ready. From over a hundred teachers, year long meetings, a summer workshop, university ecologists, this guide means realistic, developed aid for you. Please note which have directed teachers in writing and editing this guide.

1. This guide is supplementary in nature and the episodes are designed--at times--to plug into existing, logical course content.
2. Each page or episode offers suggestions. Since you know your students best, to adapt, adopt, or use. By design, the range of suggestions is wide; your experimentation and usage are even wider. Many episodes are self-contained, others can be changed in part or developed more keenly over a few weeks. The possibilities allow you to explore.
3. Now we urge that you try the episodes and suggested learning experiences plan. The reasons are simple. No guide has all the answers and no curriculum unless viewed in the context of your classroom situation. Thus, before giving it a triple reading, check over the resources listed, make mental adjustments for your prime your students, and seek help. The Project personnel and teachers' knowledge page stand ready to aid your efforts. Feel free to ask the Project.
4. The Project Resource Materials Center serves all CESA 3, 8, and 9 area schools, public or private. We will send available materials pre-paid. Call for any help, or visit. Phone 432-4338.
5. Check often the Project ICE Bibliography in your school library for available Center materials. Please offer suggestions, comments, or advice--at any time, as service may grow. Let's help each other.
6. Involve yourself with the guide by reacting to it with scratch ideas, notes, or suggestions on the episode pages or use the attached evaluation format, completed and submitted in late May next year and will be used in our revisions. We sincerely welcome reactions and suggestions--negative and positive. Please note that some references in the episodes may refer to specific, local community resources or conditions. In some cases, individual school districts and teachers will have to adopt local substitutes. A list of terms pertinent to the episodes is below.
7. Ecologists and other experts have simplified the issue--survival--yours, Creation's beauty and complexity--often noted as the work of a genius--with human energy to save. A year's work by a hundred of your fellow teachers is a gesture. Without you, their work will crumble, and so might we all--let us live to think, feel, and act in harmony with our world.

- Editorial
1. Cognitive means a measurable mental skill, ability, or process based on knowledge.
 2. Affective refers to student attitudes, values, and feelings.
 3. APWI means Acceptable Performance Will Include (labels a cognitive or affective goal).
 4. EPA - Environmental Problem Area.

PREFACE

Students about their environment, help is ready. Thanks to the efforts of members, year long meetings, a summer workshop, university consultants and means realistic, developed aid for you. Please note the following ideas for teachers in writing and editing this guide.

Elementary in nature and the episodes are designed--at appropriate instances--existing, logical course content.

The guide offers suggestions. Since you know your students best, you decide what to use. By design, the range of suggestions is wide; your chances for experience are even wider. Many episodes are self-contained, others open-ended, still others in part or developed more keenly over a few weeks. These built-in challenges are yours to explore.

You try the episodes and suggested learning experiences but please prepare simple. No guide has all the answers and no curriculum will work in the context of your classroom situation. Thus, before trying an episode, read, check over the resources listed, make mental and actual notes, and seek help. The Project personnel and teachers listed on the acknowledgments stand ready to aid your efforts. Feel free to ask their help in pre-planning. The Materials Center serves all CESA 3, 8, and 9 area schools--public and private--and available materials pre-paid. Call for any help, materials, or to 338.

Project ICE Bibliography in your school library for available Resource Materials. Please offer suggestions, comments, or advice--at any time--so that this project can help each other.

Use the guide by reacting to it with scratch ideas, notes, and extended episode pages or use the attached evaluation format, which will be collected next year and will be used in our revisions. We sincerely want your suggestions--negative and positive. Please note that some resources listed refer to specific, local community resources or conditions. In such cases, school districts and teachers will have to adopt local or available substitutes. Terms pertinent to the episodes is below.

Our experts have simplified the issue--survival--yours, mine, our students, and complexity--often noted as the work of a genius--will take our genius to save. A year's work by a hundred of your fellow teachers is a saving grace. Their work will crumble, and so might we all--literally. Instead, think, feel, and act in harmony with our world.

Editorial Board

Measurable mental skill, ability, or process based on factual data. Not based on student attitudes, values, and feelings. Measurable Performance Will Include (labels a cognitive or mental performance.) Problem Area.

ACKNOWLEDGEMENTS: The following teachers and consultants participated in the development of the Supplementary Environmental Education Guide:

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John Hussey, Green Bay
Sister Barbara, St. Bernard

Robert Cook, UWGB
Dennis Bryan, UWGB

C 1. Energy from the sun, the basic source
 O
 N of all energy, is converted through
 C
 E plant photosynthesis into a form all
 P
 T living things can use for life pro-
 cesses.

Discipline Area Language
 Subject Creative
 Problem Orientation Energy

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES
<p><u>Cognitive:</u> Students through creative writing will state the important effects of the sun on nature.</p> <p><u>Affective:</u> Children will defend the fact that things on the earth are dependent upon the sun's energy.</p>	<p>I. Student-Centered in class activity</p> <p>A. Pupil writing as Mr. Sun: "How do I effect things on earth from sunrise to sunset."</p> <p>1. As the sun awakes and arises in the morning how does it effect a leaf, a child, a house, the grass, the air: at noon and at evening are the effects the same or does it change?</p>
<p><u>Skills to be Learned</u></p> <p><u>Writing skills:</u></p> <p>Punctuation</p> <p>Capitalization</p> <p>Etc.</p> <p>Creative imagination</p>	<p>B. Plants in room</p> <p>1. One grown with the sun and the other without the sun.</p>

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Discipline Area Language Arts

Subject Creative Writing

Problem Orientation Energy Grade 5

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

A. Pupil writing as Mr. Sun:
"How do I effect things on
earth from sunrise to sun-
set."

1. As the sun awakes and
arises in the morning
how does it effect a
leaf, a child, a house,
the grass, the air: at
noon and at evening are
the effects the same or
does it change?

B. Plants in room

1. One grown with the sun
and the other without
the sun.

II. Outside Resource and
Community Activities

Resource and Reference Materials
Publications:

Film:

Mr. Sun, Bell Telephone (1 hr)

Audio-Visual:

Posters-bright colors

Appropriate music-suggesting
sunrise-sunset

Music teacher and librarian
could offer suggestions

Community:

Local photographer could
talk about the sun-its
impact on camera shots,
photo-effects, etc.

Continued and Additional Suggested

Materials	Continued and Additional Suggested Learning Experiences
(1 hr.)	

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C 2. All living organisms interact

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N among themselves and their environment, Discipline Area Language

C

E forming an intricate unit called an

Subject

Vocabulary

P

T ecosystem.

Problem Orientation Ecology

BEHAVIORAL OBJECTIVES

Cognitive: Students will accurately match ecological terms & meanings with 90% accuracy.

Affective: Student suggests ecological words and their meanings.

Skills to be Learned
Environmental words and their meanings.
Using these words.

SUGGESTED LEARNING

I. Student-Centered in class activity

A. Teacher and students draw up a list of ecological words. (Suggested list on back)

B. Together teacher and students look up definitions of words and discuss how they are used. If not completed in class, students will finish list on their own.

C. Review all words and their definitions. Teacher gives matching test.

D. The student looks for examples of these ecological terms in the home environment and reports the results to the class.

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elves and their environment, Discipline Area Language Arts

intricate unit called an Subject Vocabulary

Problem Orientation Ecosystem Grade 5

AL OBJECTIVES

Students will
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Learned
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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

A. Teacher and students draw
up a list of ecological
words. (Suggested list on
back)

B. Together teacher and students
look up definitions of words
and discuss how they are
used. If not completed in
class, students will finish
list on their own.

C. Review all words and their
definitions. Teacher gives
matching test.

D. The student looks for
examples of these ecological
terms in the home environment
and reports the results to the
class.

II. Outside Resource and
Community Activities

A. Find use of words in
newspapers, ads, and
speeches.

Resource and Reference Materials
Publications:

Audio-Visual:

Non-verbal activities to
reinforce abstractions-
posters, collage, panto-
mine, skits, dance.

Oral synonyms game.

Illustrative:

Free educational materials
from:

Local businesses

Travel agencies

DNR

State Historical Society

National Wildlife Federation

Continued and Additio

Possible Words:

1. Environment
2. Survival
3. Ecology
4. Energy
5. Population
6. Culture
7. Value
8. Economic
9. Stewardship
10. Inherit
11. Deterioration
12. Interdependent
13. Interaction
14. Limitless
15. Distribute
16. Photosynthesis
17. Capacity
18. Manipulate

ence Materials	Continued and Additional Suggested Learning Experiences																																				
<p>es to ions- panto-</p> <p>aterials</p> <p>Society e Federation</p>	<p>Possible Words:</p> <table> <tr> <td>1. Environment</td><td>19. Violate</td></tr> <tr> <td>2. Survival</td><td>20. Erosion</td></tr> <tr> <td>3. Ecology</td><td>21. Pollution</td></tr> <tr> <td>4. Energy</td><td>22. Pesticide</td></tr> <tr> <td>5. Population</td><td>23. Odor</td></tr> <tr> <td>6. Culture</td><td>24. Exhaust</td></tr> <tr> <td>7. Value</td><td>25. Sewage</td></tr> <tr> <td>8. Economic</td><td>26. Radiation</td></tr> <tr> <td>9. Stewardship</td><td>27. Incinerate</td></tr> <tr> <td>10. Inherit</td><td>28. Silt</td></tr> <tr> <td>11. Deterioration</td><td>29. Drainage</td></tr> <tr> <td>12. Interdependent</td><td>30. Litter</td></tr> <tr> <td>13. Interaction</td><td>31. Beautify</td></tr> <tr> <td>14. Limitless</td><td>32. Detergent</td></tr> <tr> <td>15. Distribute</td><td>33. Decay</td></tr> <tr> <td>16. Photosynthesis</td><td>34. Bacteria</td></tr> <tr> <td>17. Capacity</td><td>35. Aroma</td></tr> <tr> <td>18. Manipulate</td><td></td></tr> </table>	1. Environment	19. Violate	2. Survival	20. Erosion	3. Ecology	21. Pollution	4. Energy	22. Pesticide	5. Population	23. Odor	6. Culture	24. Exhaust	7. Value	25. Sewage	8. Economic	26. Radiation	9. Stewardship	27. Incinerate	10. Inherit	28. Silt	11. Deterioration	29. Drainage	12. Interdependent	30. Litter	13. Interaction	31. Beautify	14. Limitless	32. Detergent	15. Distribute	33. Decay	16. Photosynthesis	34. Bacteria	17. Capacity	35. Aroma	18. Manipulate	
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12. Interdependent	30. Litter																																				
13. Interaction	31. Beautify																																				
14. Limitless	32. Detergent																																				
15. Distribute	33. Decay																																				
16. Photosynthesis	34. Bacteria																																				
17. Capacity	35. Aroma																																				
18. Manipulate																																					

ESEA Title III - 59-70-0135-1 Project I-C-E

O 3. Environmental factors are limiting
 O
 N on the numbers of organisms living
 C
 E within their influence, thus, each
 P
 T environment has a carrying capacity.

Discipline Area _____ Lang _____
 Subject _____ Log _____
 Problem Orientation Carr _____

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
<p><u>Cognitive:</u> Students will observe how a sufficient supply of oxygen is necessary for fish to survive. Keep a daily log & evaluate it.</p> <p><u>Affective:</u> The student supports that oxygen is a necessity for life in water; there is a limit to number of fish per square inch of water.</p>	<p>I. Student-Centered in class activity</p> <ol style="list-style-type: none"> 1. Read about how to keep (gold)fish in school - upkeep, food. 2. Stock a fishbowl with one or two fish; then add one more at a time (several days apart) until it is noticeable that the fish are searching for oxygen by their continued rising to the top. 3. keep a daily account (on critical days perhaps an hourly log) on reaction of fish, if notices of lack of oxygen are evident. 	<p>II.</p>
<p><u>Skills to be Learned</u></p> <ul style="list-style-type: none"> Notetaking Observing Setting up physical apparatus Evaluating data 		

tal factors are limiting

s of organisms living

influence, thus, each

as a carrying capacity.

Discipline Area

Language Arts

Subject

Log writing & Reporting

Problem Orientation

Carry Capacity Grade 5

OBJECTIVES

Students will
sufficient
en is neces-
to survive.
og & evalu-

e student
xygen is
r life in
s a limit
ish per
water.

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

1. Read about how to keep
(gold)fish in school -
upkeep, food.
2. Stock a fishbowl with
one or two fish; then
add one more at a time
(several days apart)
until it is noticeable
that the fish are search-
ing for oxygen by their
continued rising to the
top.
3. Keep a daily account
(on critical days per-
haps an hourly log) on
reaction of fish, if
notices of lack of oxygen
are evident.

II. Outside Resource and
Community Activities

nce Materials

Continued and Additional Suggested Learning Experiences

entative

C
O
N
C
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T

4. An adequate supply of pure

Discipline Area

water is essential for life.

Subject

Problem Orientation

ESEA Title III - 59-70-0135-1 Project I-C-E

BEHAVIORAL OBJECTIVES

Cognitive: Using the first person, groups of 2 or 3 students will write their feelings of Mr. Water in its different forms.

Affective: Students will support that water in its many different forms is essential for life.

Skills to be Learned:

First-person creative writing

Research

SUGGESTED LEARNING

I. Student-Centered in class activity

1. Class discusses water cycle(view film if handy). There is practically the same

amount of water on the earth now as there was thousands of years ago.

2. Talk about different forms of Mr. Water... i.e., clouds, fog, dew, snow, rain, hail, ice, aquifier.

3. Class groups of 2 or 3 choose a water form and research their form of Mr. Water and write in first-person, their feelings of Mr. Water.

SUGGESTIONS:

Make illustrations to accompany their story and display them.

adequate supply of pure
essential for life.

Discipline Area Language Arts

Subject Language Arts

Problem Orientation E.P.A. Water Grade 5

LEARNING OBJECTIVES

Using the first
groups of 2 or 3
will write their
of Mr. Water in its
forms.
Students will
at water in its
rent forms is
for life.

be Learned:
son creative

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in
class activity
1. Class discusses water
cycle(view film if
handy). There is prac-
tically the same
amount of water on the
earth now as there was
thousands of years ago.
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forms of Mr. Water...
i.e., clouds, fog, dew,
snow, rain, hail, ice,
aquifer.
 3. Class groups of 2 or
3 choose a water form
and research their form
of Mr. Water and write
in first-person, their
feelings of Mr. Water.

SUGGESTIONS:

Make illustrations to
accompany their story
and display them.

- II. Outside Resource and
Community Activities

Resource and Reference Materials
Publications:

Busy Water, Irma Simonton Black,
E 551.4 (water cycle described)
B56

Wonders of Snow and Ice,
Christie McFall
551.5
M163

Water for Your Community,
Edward Radtauer
628.1
B 119

Dittoed excerpts from Rachel
Carson's "The Sea Around Us"
(some interesting sections
about origins and chemistry of
water - non-technical)

Annotated Checklist of 200 Short
Films for Writing Classes
Illinois Assn. of Teachers
of English, Urbana, Ill. 35¢

Audio-Visual

"Waters From the Mountain," 16mm.
sound, 20 min. (snow)

Community:

Continued and Additional Sugges

Materials

Continued and Additional Suggested Learning Experiences

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e described)

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nd Us"
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200 Short

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C 5. An adequate supply of clean air is

O

N essential because most organisms depend

C

E on respiration to supply the oxygen

P

T needed to release the energy in their food.

Discipline Area

Subject

Problem Orientation

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING

Cognitive: Students will give campaign speech citing his solutions to air pollution problem.

Affective: Through campaigning, the students will challenge the political complexity of an environmental issue.

Skills to be Learned

Organization and compiling a speech.

Oral presentation as competition.

Techniques of balloting and voting.

1. Student-Centered in class activity

1. Conduct speech contest on "I am against air pollution because...When elected I will...(to stop air pollution)"

2. Have the children pretend they are running for office (as mayor or other local office) and they must convince their audience that "I am against air pollution because....and when I am elected I will...(do what to stop air pollution)"

After speeches the class will cast ballots and vote for their best candidate.

3. Winning candidate might give his report to other classes.

SUGGESTIONS FOR PREPARATION:

4. Tape speeches to be replayed by individuals for self exam of speech skills or judged by local (cont.)

ESEA Title III - 59-70-0135-1 Project I-C-E

adequate supply of clean air is

because most organisms depend

on plants to supply the oxygen

and release the energy in their

Discipline Area

Language Arts

Subject

Speech

Problem Orientation E.P.A. Air Grade 5

ORAL OBJECTIVES

Students will give
each citing his
air pollution

through campaign-
students will
political
an environ-

Learned

and compiling

ation as

f balloting

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in
class activity

1. Conduct speech contest
on "I am against air
pollution because...When
elected I will...(to stop
air pollution)"

2. Have the children pre-
tend they are running
for office(as mayor or
other local office) and
they must convince their
audience that "I am
against air pollution
because....and when I
am elected I will...(do
what to stop air pollu-
tion)"

After speeches the class
will cast ballots and vote
for their best candidate.

3. Winning candidate might
give his report to other
classes.

SUGGESTIONS FOR PREPAR-
ATION:

4. Tape speeches to be re-
played by individuals for
self exam of speech skills
or judged by local (cont.)

II. Outside Resource and
Community Activities.

Resource and Reference Materials Publications:	Continued and Additional Suggested
<p>Vital speeches-periodical excerpts or dittoed parts of speeches dealing with ecology.</p> <p>HEW - reports, speeches by Sec. Udall.</p> <p>Silent Spring (excerpts) Robert Carson</p> <p><u>Thirty Basic Speech</u> <u>Experiences</u> - Clark Publishing Co, Pokatello, Idaho</p> <p>4-H Form for judging speaking contests - 4-H Soil and Water Conservation.</p>	<p>I. (cont.) people.</p>
<p><u>Audio-Visual:</u></p>	
<p><u>Community:</u></p>	

Materials	Continued and Additional Suggested Learning Experiences
<p>1 excerpts eches</p> <p>by Sec.</p> <p>o,</p> <p>aking</p>	<p>I. (cont.) people.</p>

C 6. Natural resources are not equally

O

N distributed over the earth or over

C

E time and greatly affect the geographic

P

T conditions and quality of life.

Discipline Area

Lang

Subject

Diary

Natu

Problem Orientation

Reso

BEHAVIORAL OBJECTIVES

Cognitive: By the means of a diary, the student will record their observation of birds & related conditions on given days.
Affective: Through the gathering of information and recording of data, the student will suggest reasons for the varying number & species of birds per day.

Skills to be Learned

Observing birds
 weather
 seasons
Writing a first-person diary

SUGGESTED LEARNING EX

I. Student-Centered in class activity

II.

1. After outside observations, the children come back inside to write their observations in a first-person diary (first person diary may have to be explained to class by teacher-with examples.) The diary should consist of an 8-page booklet- left half of page for diary & right half for pictures of birds observed that day. (The first day may take more time to construct a booklet- could use a regular 8 1/2 x 11" sheet of paper folded in half for one day's work.

The diary should be a personal possession and neither teacher nor other students may read it if so wished by writer.

ESEA Title III - 59-70-0135-1 Project I-C-E

ces are not equally

the earth or over

affect the geographic

ality of life.

Discipline Area

Language Arts

Subject

Diary

Natural

Problem Orientation

Resources

Grade

5

ECTIVES

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. After outside observations, the children come back inside to write their observations in a first-person diary (first person diary may have to be explained to class by teacher-with examples.) The diary should consist of an 8-page booklet- left half of page for diary & right half for pictures of birds observed that day. (The first day may take more time to construct a booklet- could use a regular 8 1/2 x 11" sheet of paper folded in half for one day's work.

The diary should be a personal possession and neither teacher nor other students may read it if so wished by writer.

II. Outside Resource and Community Activities

1. Teacher explain that this is a project that will take place on the Mondays of April & May (day or months may change to suit class schedule.)

The first fifteen minutes the children will go outside looking for birds (Their color, sounds, habits, name) and also note any significant weather conditions that might explain why there are so many birds or the lack of birds on each particular Monday.

The children may wish to take notes while outside if they don't think they can remember all the information.

Source Materials	Continued and Additional Suggested Learning Experiences
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Foder,
rnal".

National

C 7. Factors such as facilitating transportation,
 O
 N economic conditions, population growth, Discipline Area Language Arts
 C
 E and increased leisure time have a great Subject Expository
 P
 T influence on changes in land use and Problem Orientation Land Use
centers of population density.

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
<u>Cognitive:</u> Through use of film or field trip, students write their impressions on how highways change the use of the land. <u>Affective:</u> Students dispute the question of the basic necessity of good land use.	I. Student-Centered in class activity	II. Outside Communi A. Intr (eith or ru of fi Peopl local enorm for h B. With write these C. Each impre class comme D. Clas come concl
<u>Skills to be Learned</u> Expository writing Questioning Discussion Draw conclusions		

such as facilitating transportation,

conditions, population growth, Discipline Area Language Arts

used leisure time have a great Subject

Expository Writing

on changes in land use and
population density.

Problem Orientation Land Use

Grade 5

GENERAL OBJECTIVES

Through use of
and trip, students
impressions on
change the use

Students dispute
of the basic
good land use.

Learned
writing

sions

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

II. Outside Resource and
Community Activities

- A. Introduction of land use
(either for highway exchange
or rural work land) by means
of film Highways are For
People or by a field trip to
local express exchange to see
enormous amount of land used
for highways.
- B. Without discussion, students
write their impressions of
these types of land use.
- C. Each student reads his
impression out loud. Rest of
class asks questions or adds
comments.
- D. Class tries to summarize or
come up with a general
conclusion of their impression.

Resource and Reference Materials

Publications:

National Safety Council, AAA

Audio-Visual:

Film:

Highways Are For People, 1968,
16 mm, Sound, 27 min.,
Federal Highway Administration

Community:

Road Commissioner or good representative

Continued and Additional Suggested Leads

Materials

Continued and Additional Suggested Learning Experiences

AAA

1968,
ration

C 8. Cultural, economic, social, and
 O
 N political factors determine status
 C
 E of man's values and attitudes
 P
 T toward his environment.

Discipline Area _____ Language _____
 Subject _____ Reading _____
 Problem Orientation Food C _____

ESEA Title III - 59-70-0135-1 Project I-C-E

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES
<p>Cognitive: Students will list in order the food chain of an animal and describe the effect that takes place if this chain is broken.</p> <p>Affective: The child submits evidence that interference with any single segment of any chain of living things can cause problems.</p>	<p>I. Student-Centered in class activity</p> <ol style="list-style-type: none"> 1. Teacher introduces the lesson quoting John Muir: "When we try to pick out anything by itself, we find it hitched to everything else in the universe." natural resources. 2. Children - Think, then write down the chain of dependency. 3. Class discussion to agree or disagree with John Muir. 4. Teacher reads part of <u>America's Endangered Wildlife</u> to the class.
<p><u>Skills to be Learned</u></p> <p>Logical thinking Thinking in sequence Cause & effect</p>	

economic, social, and
 factors determine status
 values and attitudes
 environment.

Discipline Area Language Arts
 Subject Reading
 Problem Orientation Food Chain Grade 5

L OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
<p>Students will the food imal and effect that this chain</p> <p>e child ce that ith any of any g things lems.</p>	<p>I. Student-Centered in class activity</p> <ol style="list-style-type: none"> 1. Teacher introduces the lesson quoting John Muir: "When we try to pick out anything by itself, we find it hitched to everything else in the universe." natural resources. 2. Children -- Think, then write down the chain of dependency. 3. Class discussion to agree or disagree with John Muir. 4. Teacher reads part of <u>America's Endangered Wildlife</u> to the class. 	<p>II. Outside Resource and Community Activities</p> <ol style="list-style-type: none"> 1. Use the out-of-doors or go to school windows to observe the chain of dependency. Ex. - The killing off of the fox - What happens to the rabbits? Porcupines? Squirrels? Mice? Shrews? etc.
<p>learned ing equence t</p>		

Resource and Reference Materials
Publications:
America's Endangered Wildlife by
George Laycock.

Audio-Visual:
Audubon Food Chain chart

Community:
National Wildlife Federation
(publications)
National Audubon Society

Continued and Additional Suggeste

Materials	Continued and Additional Suggested Learning Experiences
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C 8. Cultural, economic, social, and
O
N political factors determine status
C
E of man's values and attitudes
P
T toward his environment.

Discipline Area

Subject

Problem Orientation

ESEA Title III - 59-70-0135-1 Project I-C-E

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING ACTIVITIES

Cognitive: Given a wildlife stamp the students through creative writing, will express their ideas on a pollution free environment as is illustrated in the stamps.
Affective: The student will volunteer to express his creative ideas about the stamps.

Skills to be Learned
Creative writing

- I. Student-Centered in class activity
- A. Teacher or pupil places conservation stamps (National Wildlife) on front table.
1. Each child chooses an area of the group.
2. Child pastes this on writing or composition paper.
3. Teacher suggests the children to now write a poem, paragraph, story or just write statements about their stamp.
4. Display these papers.

ral, economic, social, and

l factors determine status

values and attitudes

is environment.

Discipline Area Language Arts

Subject Creative Writing

Problem Orientation Attitudes Grade 5

MORAL OBJECTIVES

Given a wildlife
students through
riting, will
eir ideas on a
free environment
strated in the

The student will
to express his
deas about the

be Learned
writing

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

- A. Teacher or pupil places
conservation stamps
(National Wildlife) on
front table.
1. Each child chooses any
one of the group.
 2. Child pastes this on
writing or composition
paper.
 3. Teacher suggests the
children to now write
a poem, paragraph,
story or just write
statements about their
stamp.
 4. Display these papers.

II. Outside Resource and
Community Activities

Resource and Reference Materials <u>Publications:</u>	Continued and Additional Suggest
<p><u>Audio-Visual:</u></p> <p>National Wildlife Stamp or any colorful stickers Start a picture library and thus involve students</p> <p><u>Community:</u></p> <p>Audubon Society National Geographics Wis. Historical Society</p>	

Materials	Continued and Additional Suggested Learning Experiences
<p>or any</p> <p>and thus</p>	

C 9. Man has the ability to manage,
O
N manipulate, and change his
C
E environment.
P
T

Discipline Area Language
Subject Speech
Nat
Problem Orientation Res

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING
<p><u>Cognitive:</u> By writing & presenting a speech for a radio presentation, the students will acknowledge their part in managing their environment.</p> <p><u>Affective:</u> The students will promote individual & community involvement in environmental problems by presenting a radio broadcast.</p>	<p>I. Student-Centered in class activity</p> <p>A. Classroom activity</p> <ol style="list-style-type: none"> Teacher & students plan what can be presented as a radio environment program: <ol style="list-style-type: none"> Local problem areas Ways children of all ages can get involved Community involvement Each student writes his view of one of the above topics to be used as a speech. Speeches are taped (to prevent individual favoritism) & then listened to by class to choose the ones to be used as the radio broadcast. Students practice presentations on tapes. Possibly, the children could write words to a familiar tune to open & close the program.
<p><u>Skills to be Learned</u></p> <p>Speech writing</p> <p>Tape presentation</p> <p>Poetry writing (to song)</p> <p>Feeling of pride in their community</p>	

has the ability to manage,

late, and change his

ment.

Discipline Area Language Arts

Subject

Speech Writing & presentation

Natural

Problem Orientation

Resources

Grade

5

BEHAVIORAL OBJECTIVES

e: By writing &
ng a speech for
presentation, the
will acknowledge
rt in managing
vironment.

e: The students
note individual &
y involvement in
ental problems by
ng a radio broad-

to be Learned

writing
resentation
writing (to song)
of pride in
community

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

A. Classroom activity

1. Teacher & students plan what can be presented as a radio environment program:
 - a. Local problem areas
 - b. Ways children of all ages can get involved
 - c. Community involvement
2. Each student writes his view of one of the above topics to be used as a speech.
3. Speeches are taped (to prevent individual favoritism) & then listened to by class to choose the ones to be used as the radio broadcast.
4. Students practice presentations on tapes.
5. Possibly, the children could write words to a familiar tune to open & close the program.

II. Outside Resource and Community Activities

A. Other activity

1. Have some of the students contact the radio station to see if they can come to school or if they may go to the studio.

Continued and Additional Suggested Learning Experiences

C 10. Short-term economic gains may

O

N produce long-term environmental

C

E losses.

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Discipline Area Lang

Subject

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Problem Orientation U

BEHAVIORAL OBJECTIVES

Cognitive: By writing a before and after account of a forest logging operation, the student will realize that a short-time gain may produce a long-term environmental loss.
Affective: Students will compare short-term gains and long-term effects of forest management.

Skills to be Learned

Discussion
 Writing
 Making comparisons
 Skill of foresight

SUGGESTED LEARNING

I. Student-Centered in class activity

A. Classroom

1. Teacher & students discuss a hypothetical situation where maple lumber is suddenly in great demand (for some product). I, as an owner of a large maple forest, have a chance to make a great deal of money if I harvest all the maple trees in my woods. My neighbors are convinced of the same thing, so we contract a logging firm to cut all our trees.
2. Class discussion as to what may be the implications of such a procedure.
3. Write a "before and after" account of the area.
4. The students may want to make a sketch of "before and after" view of the area.

-term economic gains may

ong-term environmental

Discipline Area Language Arts

Subject Writing

Resource

Problem Orientation Usage Grade 5

ORAL OBJECTIVES

By writing a
after account of
gging operation,
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al loss.
Students will
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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

A. Classroom

1. Teacher & students discuss
a hypothetical situation
where maple lumber is suddenly
in great demand (for some new
product). I, as an owner of a
large maple forest, have a
chance to make a great deal of
money if I harvest all the
maple trees in my woods. My
neighbors are convinced of the
same thing, so we contract a
logging firm to cut all our
trees.
2. Class discussion as to what
may be the implications of
such a procedure.
3. Write a "before and after"
account of the area.
4. The students may want to draw
a sketch of "before and after"
view of the area.

II. Outside Resource and
Community Activities

Resource and Reference Materials	Continued and Additional Suggested
<p><u>Publications:</u></p> <p><u>Conservation</u>, Nat'l Wildlife College of Agriculture bulletins, County Forester Office</p> <p><u>Audiotape 1:</u></p> <p>County Library, 8 min , Forest Murmurs, Color</p> <p><u>Filmstrip:</u></p> <p>Brown County Library, <u>Enemies of</u> <u>the Forest</u>, 634.9</p> <p><u>Forest Conservation</u>, 634.9</p> <p><u>Our Forest & What they Mean to</u> <u>Us</u>, 634.9</p> <p><u>Community:</u></p>	

Materials

Continued and Additional Suggested Learning Experiences

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bulletins,

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Enemies of

634.9

Mean to

ESEA Title III - 59-70-0135-1 Project I-C-E

C 11. Individual acts, duplicated
O
N or compounded, produce significant
C
E environmental alterations over time.
P
T

Discipline Area Language
Subject Writing
Problem Orientation Ener

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING EXP

Cognitive: Through recognition of air pollution by identification of three air pollutants-by smelling, seeing and feeling-students write their opinions on how these affect them.
Affective: The heat and rays of the sun could be stopped by a blanket of earth's pollutants. Students will evaluate how this affects them.

Skills to be Learned
Writing of opinions
Discussion

I. Student-Centered in class activity

1. Teacher and students present ideas of sun's rays not being able to reach the earth. Why?

2. Discuss:

a. known pollutants- clouds, smog, smoke from chimneys

b. how they affect me and my neighbors - sight, smell, health

and their thoughts on pollution and its affects on the sun and us.

II. Ou

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Discipline Area Language Arts

Subject

Writing

Problem Orientation Energy

Grade 5

OBJECTIVES

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. Teacher and students present ideas of sun's rays not being able to reach the earth. Why?
2. Discuss:
 - a. known pollutants - clouds, smog, smoke from chimneys
 - b. how they affect me and my neighbors - sight, smell, health
3. Write their thoughts on pollution and its affects on the sun and us.

II. Outside Resource and Community Activities

1. How clear is the air. Look at pollution and their causes.
2. Interview local factory owner, farmer and Department of Natural Resource representative.
3. Visit fertile and polluted land plots - near school, nearby farm.

Resource and Reference Materials
Publications:

Continued and Additional Sugge

Audio-Visual:

Photographs:

Local slides-student made
Three dimensional model of
land plot-student made
and illustrated with
graphic-polluted effect.

Community:

Interview local

Materials	Continued and Additional Suggested Learning Experiences
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C 12. Private ownership must be re-
 O
 N garded as a stewardship and should
 C
 E not encroach upon or violate
 P
 T the individual right of others.

Discipline Area Language Arts
 Subject Language Arts
 Problem Orientation Conservation

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
<p><u>Cognitive:</u> The students will survey an area, report their findings to the class, discuss the issue and finally list ways to remedy a situation where private ownership should be regarded as a stewardship and should not encroach upon or violate the individual right of others.</p> <p><u>Affective:</u> Students will share pleasure and satisfaction in resolving an issue after class discussion especially on stewardship.</p>	<p>I. Student-Centered in class activity</p> <p>1. Discussion could follow reports on outside activities to list ways they as fifth graders could remedy this abuse.</p>	<p>II. Outside Community</p> <p>1. Students of law</p> <p>2. Students city given a city see how of big</p> <p>3. Report the class</p>
<p><u>Skills to be Learned</u></p> <p>Surveying</p> <p>Discussion</p> <p>Listing</p> <p>Report of statistics</p>		

must be re-

p and should

violate

of others.

Discipline Area Language Arts

Subject Language Arts

Problem Orientation Conservation Grade 5

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. Discussion could follow reports on outside activities to list ways they as fifth graders could remedy this abuse.

II. Outside Resource and Community Activities

1. Students make survey of lawns in a given area.
2. Students living in the city could be assigned a given area (for example, a city block) to check to see how many find examples of bicycle abuse of lawns.
3. Report their findings to the class.

Resource and Reference Materials
Publications:

Continued and Additional Suggested

Audio-Visual:

Bicycling riding film-

The Day the Bicycle Disappeared

AAA Foundation for Traffic for
Safety (Local automobile clubs)

Community:

Local park commissioner or
street commissioner

"Victims" of bicycle damage
(local person on block whose
lawn has been damaged.)

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Continued and Additional Suggested Learning Experiences

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PROJECT I-C-E

Episode Evaluation Form (Reproduce or duplicate as needed)

In commenting on each episode used in your class, you may wish to format. Please feel free to adapt it and add more pages. Let us know comments - negative and positive.

I. Behavioral Objectives

A. Cognitive:

B. Affective:

II. Skills Developed

III. Suggested Learning Experiences

A. In Class:

B. Outside & Community Activities

IV. Suggested Resource & Reference Materials (specific suggestions & comments)

PROJECT I-C-E

Episode Evaluation Form (Reproduce or duplicate as needed)

on each episode used in your class, you may wish to duplicate this suggested
Feel free to adapt it and add more pages. Let us know all your critiques and
ive and positive.

Objectives

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uggestions & comments)

Project I - C - E

INSTRUCTION - CURRICULUM - ENVIRONMENT

ED055919

A SUPPLEMENTARY PROGRAM FOR ENVIRONMENTAL EDUCATION

DISCIPLINE AREA Language Arts GRADE 6

Produced under Title III E.S.E.A.
PROJECT I-C-E
Serving Schools in CESA's 3-8-9
1927 Main Street
Green Bay, Wisconsin 54301
(414) 432-4338

Robert Wa
Robert Ke
George Ho

E

INSTRUCTION - CURRICULUM - ENVIRONMENT

PROGRAM FOR ENVIRONMENTAL EDUCATION

Language Arts GRADE 6

Title III E.S.E.A.

in CESA's 3-8-9

onsin 54301

Robert Warpinski, Director
Robert Kellner, Asst. Director
George Howlett, EE Specialist

PREFACE

If you wish to excite students about their environment, help is re- of over hundred teachers, year long meetings, a summer workshop, u- ecologists, this guide means realistic, developed aid for you. Plea- which have directed teachers in writing and editing this guide.

1. This guide is supplementary in nature and the episodes are design- ces--to plug into existing, logical course content.
2. Each page or episode offers suggestions. Since you know your stu- to adapt, adopt, or use. By design, the range of suggestions is w- mentation and usage are even wider. Many episodes are self-contain- others can be changed in part or developed more keenly over a few possibilities allow you to explore.
3. Now we urge that you try the episodes and suggested learning expe- plan. The reasons are simple. No guide has all the answers and unless viewed in the context of your classroom situation. Thus, give it a triple reading, check over the resources listed, make m- prime your students, and seek help. The Project personnel and tea- knowledge page stand ready to aid your efforts. Feel free to
4. The Project Resource Materials Center serves all CESA 3, 8, and 9 private. We will send available materials pre-paid. Call for an visit. Phone 432-4338.
5. Check often the Project ICE Bibliography in your school library f- Center materials. Please offer suggestions, comments, or advice- service may grow. Let's help each other.
6. Involve yourself with the guide by reacting to it with scratch id- suggestions on the episode pages or use the attached evaluation f- lected in late May next year and will be used in our revisions. W- reactions and suggestions--negative and positive. Please note tha- in the episodes may refer to specific, local community resources cases, individual school districts and teachers will have to adop- stitutes. A list of terms pertinent to the episodes is below.
7. Ecologists and other experts have simplified the issue--survival- Creation's beauty and complexity--often noted as the work of a ge- and human energy to save. A year's work by a hundred of your fel- gesture. Without you, their work will crumble, and so might we a- let us live to think, feel, and act in harmony with our world.

1. Cognitive means a measurable mental skill, ability, or process
2. Affective refers to student attitudes, values, and feelings.
3. APWI means Acceptable Performance Will Include (labels a cogni-
4. EPA - Environmental Problem Area.

PREFACE

to excite students about their environment, help is ready. Thanks to the efforts of teachers, year long meetings, a summer workshop, university consultants and this guide means realistic, developed aid for you. Please note the following ideas suggested by teachers in writing and editing this guide.

This guide is supplementary in nature and the episodes are designed--at appropriate instances--into existing, logical course content.

Each episode offers suggestions. Since you know your students best, you decide what to adopt, or use. By design, the range of suggestions is wide; your chances for experimental usage are even wider. Many episodes are self-contained, others open-ended, still others changed in part or developed more keenly over a few weeks. These built-in changes allow you to explore.

That you try the episodes and suggested learning experiences but please pre-plan reasons are simple. No guide has all the answers and no curriculum will work unchanged in the context of your classroom situation. Thus, before trying an episode, do a little reading, check over the resources listed, make mental and actual notes, discuss with students, and seek help. The Project personnel and teachers listed on the acknowledgment page stand ready to aid your efforts. Feel free to ask their help in pre-planning. The Resource Materials Center serves all CESA 3, 8, and 9 area schools--public and private--and will send available materials pre-paid. Call for any help, materials, or to the Project at 432-4338.

Check the Project ICE Bibliography in your school library for available Resource Materials. Please offer suggestions, comments, or advice--at any time--so that this project can grow. Let's help each other.

Work with the guide by reacting to it with scratch ideas, notes, and extended comments on the episode pages or use the attached evaluation format, which will be collected May next year and will be used in our revisions. We sincerely want your suggestions--negative and positive. Please note that some resources listed in the episodes may refer to specific, local community resources or conditions. In such cases, individual school districts and teachers will have to adopt local or available substitutes. A list of terms pertinent to the episodes is below. Other experts have simplified the issue--survival--yours, mine, our students, the beauty and complexity--often noted as the work of a genius--will take our genius and energy to save. A year's work by a hundred of your fellow teachers is a saving grace without you, their work will crumble, and so might we all--literally. Instead, let's try to think, feel, and act in harmony with our world.

Editorial Board

Intelligence means a measurable mental skill, ability, or process based on factual data. Attitude refers to student attitudes, values, and feelings.

Acceptable Performance Will Include (labels a cognitive or mental performance.)
Environmental Problem Area.

ACKNOWLEDGEMENTS: The following teachers and consultants participated of the Supplementary Environmental Education Guide:

CESA #3

Eugene Anderson, Peshtigo
 Laura Berken, Oconto Falls
 Willard Collins, Crivitz
 John Cowling, Niagara
 Nicholas Dal Santo, Pembine
 Robert Dickinson, Oconto
 Ann Fuhrmann, Marinette
 Lillian Goddard, Coleman
 William Harper, Lena
 Robert Herz, St. James (L)
 Ester Kaatz, Wausaukee
 Michael Kersten, Suring
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 Donald Marsh, Bonduel
 David Miskulin, Goodman
 Don Olsen, Shawano
 Elmer Schabo, Niagara
 Marion Wagner, Gillett
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 Virginia Pomusl, White Lake
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CESA #8

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 Barbara Huth, Menasha
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 William Schaff, St. Joseph
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 Carolyn Shills, New London
 Sister Dorothy, Xavier
 Clarence Trentlage, Freedom
 Mike Hawkins, Xavier
 Beth Hawkins, Xavier
 Ed Patschke, Menasha
 Connie Peterson, St. Martin (L)
 Dallas Werner, Kaukauna
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Oconto Falls	William Behring, Lourdes
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Oconto	Bob Church, Little Chute
Marinette	Ronald Conradt, Shiocton
Coleman	Lee Halberg, Appleton
Lena	Ronald Hammond, Hortonville
James (L)	Jerome Hennes, Little Chute
Wausaukee	Barbara Huth, Menasha
Suring	Darrell Johnson, Hortonville
Math. Central	Bernadyne King, Neenah
Wendell	Harold Lindhorst, St. Martin (L)
Goodman	John Little, Winneconne
Omro	Gordon Rohloff, Oshkosh
Niagara	William Schaff, St. Joseph
Gillett	Doris Stehr, Mt. Calvary (L)
Bartz	Carolyn Shills, New London
Marinette	Sister Dorothy, Xavier
White Lake	Clarence Trentlage, Freedom
White Lake	Mike Hawkins, Xavier
Wausaukee	Beth Hawkins, Xavier
Gillett	Ed Patschke, Menasha
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	Dallas Werner, Kaukauna
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 David Bartz, Sturgeon Bay
 John Hussey, Green Bay
 Sister Barbara, St. Bernard

Marinette Ednajeane Purcell, OSU
 UW-Marquette David West, Lawrence U.

Robert Cook, UWGB
 Dennis Bryan, UWGB

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BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING

Cognitive: The student will demonstrate the proper letter writing form by writing a letter to Mr. Sun.
Affective: Students will identify with the life giving forces of the sun. The student will accept the sun's work in spite of man's desires.

Skills to be Learned
Letter Writing
Review of
Paragraphs
Punctuation
Spelling
Penmanship

- I. Student-Centered in class activity
 - A. Discuss form for letter writing-(friendly letter)
 - B. Review in group discussion, our dependence on the sun.
 - C. View film or appropriate filmstrip-charts.
 - D. Write a letter to Mr. Sun, choice:
 1. Expressing appreciation of what he does.
 2. Expressing dissatisfaction over disrupted plans.
 3. Relating any experience in which you and the sun were involved.
 4. Requesting a specific kind of weather.
 5. Relating to the sun something you know about him.

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Discipline Area Language Arts

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Writing - Letter Writing

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Grade 6

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OBJECTIVES

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

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 4. Requesting a specific kind
of weather.
 5. Relating to the sun some-
thing you know about him.

II. Outside Resource and
Community Activities

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Continued and Additional Suggested Learning Experiences

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C 2. All living organisms interact among
 O themselves and their environment,
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 C forming an intricate unit called an
 E
 P ecosystem.
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Discipline Area Language
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 Problem Orientation Eco

BEHAVIORAL OBJECTIVES

Cognitive: Through the use of reference skills and critical reading, the child will list 5 different examples in which animals interact among themselves to provide a balance in nature.

Affective: Animals are part of a food chain. Critical reading and reference skills enhance avenues to further investigate the interaction of animals to maintain an intricate unit called an ecosystem.

Skills to be Learned

One goal in reference skills is to go to more than one source. Since animals are both predators & prey, a student must research more information about the interaction among animals. Read critically.

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

A. Classroom

1. Discuss how animals depend on each other for a food source.

Select an animal & investigate what it eats & what it is a prey of.

2. Use reference material within room to investigate food chain.

B. Compare what was discovered on field trip to findings from library work. Discuss similarities & differences.

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Discipline Area Language Arts

Subject Critical Reading & Reference

Problem Orientation Ecosystem Grade 6

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

A. Classroom

1. Discuss how animals depend on each other for a food source. Select an animal & investigate what it eats & what it is a prey of.

2. Use reference material within room to investigate food chain.

B. Compare what was discovered on field trip to findings from library work. Discuss similarities & differences.

II. Outside Resource and Community Activities

A. Library

1. Go to reference material to check food chain of animals.
2. Write reports on the types of animals that are prey to particular animals, & what animals are its predators.

B. Community

1. Visit a zoo, farm, fish hatchery & have guided tour. Discuss the food chain of animals found in area.

C. Have a game warden visit the classroom & discuss the intricate food chain necessary to maintain life. Explain why people are allowed to hunt animals such as deer. Discuss what would happen if deer were not killed off by hunters.

Resource and Reference Materials

Publications:

Encyclopedia

Card catalog

Magazines

Audio-Visual:

Community:

State Historical Society

Wildlife Federation

DNR

Continued and Additional Suggested Le

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Continued and Additional Suggested Learning Experiences

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BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING
<p><u>Cognitive:</u> The class will compose a <u>yes</u> and <u>no</u> questionnaire on the issue of the deer party permit in their state and evaluate the summary.</p> <p><u>Affective:</u> The student will argue pro or con that deer party permits are issued according to the carrying capacity of the area.</p>	<p>I. Student-Centered in class activity</p> <ol style="list-style-type: none"> 1. Discuss the issue whether a party permit for hunting deer should be allowed in the state of Wisconsin. 2. Pupils prepare a questionnaire that could be answered with <u>yes</u> & <u>no</u> about the issue. 3. Each student should take one or more questionnaires to different people in their home & community. 4. Each student will write his own evaluation of the survey. 5. Some students will write an article for the school or local newspaper.
<p><u>Skills to be Learned</u></p> <p>Class discussion</p> <p>Comparing questions for <u>yes</u> & <u>no</u> answers</p> <p>Making a survey</p> <p>Evaluating information in paragraph form.</p>	

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Discipline Area Language Arts

Subject Survey

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SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
 1. Discuss the issues whether a party permit for hunting deer should be allowed in the state of Wisconsin.
 2. Pupils prepare a questionnaire that could be answered with yes & no about the issue.
 3. Each student should take one or more questionnaires to different people in their home & community.
 4. Each student will write his own evaluation of the survey.
 5. Some students will write an article for the school or local newspaper.

- II. Outside Resource and Community Activities
 1. Students will tabulate the results of the questionnaire.

Resource and Reference Materials	Continued and Additional Suggest
<p><u>Publications:</u></p> <p><u>National Wildlife Magazine,</u> <u>White-Tailed Deer</u></p> <p><u>Audio-Visual:</u></p> <p>Films available from the Department of Natural Resources</p> <p><u>Community:</u></p> <p>Representative from a local Sportsman Club Representative from the Game Management Division</p>	

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Continued and Additional Suggested Learning Experiences

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4. An adequate supply of pure water
is essential for life.

Discipline Area

Subject

Problem Orientation

BEHAVIORAL OBJECTIVES

Cognitive: Through researching and formal speaking, the child will demonstrate and project four ways in which life patterns are formed by the distribution of water supply.
Affective: Formal speaking requires necessary research into the subject matter to have a better understanding of the subject. This provides a method by which the student proposes the importance of pure water supply on all living things.

Skills to be Learned

Artificial analysis of the importance of proper water supply would be necessary. From that point, reference and research skills would be necessary. The data collected would have to be put into logical order to present speech to class.

SUGGESTED LEARNING

- I. Student-Centered in class activity
 1. Read material on the water cycle.
 2. Research areas that are desert and those that have adequate water supply. Find types of life found in each. Example: camel - its adaptations.
 3. Discuss how animal communities survive in areas around a water body such as pond or river.
 4. Discuss how cities are located on or near a source of water. Discuss how the sanitation department must continually check quality of water.
 5. Assign after researching effects of water supply--student will present a chart talk on how water affects a certain type animal in its living habits. The child may use only note cards.

Adequate supply of pure water
essential for life.

Discipline Area Language Arts

Subject Oral report

Problem Orientation E.P.A. Water Grade 6

TOPICAL OBJECTIVES

Through research-formal speaking, will demonstrate four ways in which patterns are the distribution of water supply. Formal speaking necessary research subject matter to better understand subject. This method by which it proposes the distribution of pure water to all living

to be Learned

1. Analysis of the importance of proper water distribution would be necessary. point, reference which skills would be necessary. The data would have to be in logical order to present to class.

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
 1. Read material on the water cycle.
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 3. Discuss how animal communities survive in areas around a water body such as pond or river.
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 5. Assign after researching effects of water supply--student will present a chart talk on how water affects a certain type animal in its living habits. The child may use only note cards.

- II. Outside Resource and Community Activities
 1. Send child to library to gain further information on animal they are researching.
 2. Have conservationist talk to class on animal life around water supply.
 3. Take class to river bank or small pond and examine an animal life or footprints and make molds. Examine and classify to appropriate animal.
 4. Take field trip to sanitation department and explore necessary water treatment facilities.
 5. In Fall, take trip to Fox River and note water pollution in process.

Materials	Continued and Additional Suggested Learning Experiences

C 5. An adequate supply of clean air is
O
N essential because most organisms de-
C
E pend on respiration to supply the
P
T oxygen needed to release the energy
in their food.

Discipline Area _____ La

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BEHAVIORAL OBJECTIVES

Cognitive: Through the use of a T.V. commercial technique, visually demonstrate to the students the significance of air pollution.
Affective: The student will promote the fact that air pollution is a big problem and is everyone's responsibility.

Skills to be Learned
Creative Writing
 Convincing someone of the significance of an issue.
 Power of persuasion.

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
1. Brainstorm kinds of air pollution (put on board).
 2. Divide class into groups of 3 or 4.
 3. Each group picks one kind of air pollution.
 4. Each group will demonstrate a T.V. commercial on a paper scroll shown through a cardboard box T.V. set.

Any form of creative writing could be used as the verbal part of the commercial such as poetry, songs (original), narration. Drawings could be in color or black and white.

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Discipline Area

Language Arts

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Any form of creative
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as the verbal part of
the commercial such as
poetry, songs (original),
narration. Drawings
could be in color or
black and white.

II. Outside Resource and
Community Activities

Resource and Reference Materials	Continued and Additional Suggest
<p><u>Publications:</u></p> <p>Magazines</p> <p>Newspapers</p> <p>Pamphlets</p> <p>Conservation Dept.</p> <p>D.N.R.</p> <p><u>Audio-Visual:</u></p> <p>Previous to activity watch commercial at home and observe:</p> <p>Type of message</p> <p>Length of message</p> <p>Impact of message</p> <p>Type of graphic</p> <p><u>Community:</u></p>	

Materials

Continued and Additional Suggested Learning Experiences

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Discipline Area _____ L

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BEHAVIORAL OBJECTIVES

Cognitive: Through re-
search & critical writing,
the child will compare &
contrast two communities,
one affluent & one deprived,
such as the Fox River Valley
and Upper Michigan.
Affective: The child will,
by researching two com-
pletely different geogra-
phic areas, demonstrate
that he is able to critically
analyze how man is depen-
dent on the various geogra-
phic conditions peculiar
to the region.

Skills to be Learned

Researching is an intricate
part of comparing & con-
trasting. The student must
read critically about two
diverse regions & find simi-
larities & differences caused
by geographic conditions in
order to analyze critically.

SUGGESTED LEARNING

- | | |
|--|-----------|
| <p>I. Student-Centered in class activity</p> <ol style="list-style-type: none"> 1. Discuss how communities are dependent on the geographic conditions, such as paper making on the Fox River, farming in well-irrigated lands, recreation in wilderness areas. 2. Make bulletin board display on ways man is dependent on the type of conditions within 2 completely different regions. Exchange of letters with other 6th grade students of different areas. 3. Have students write a report on ways people differ in the two areas selected by individuals. Students should not be allowed to copy from book, but instead use all resources they included by means of note-taking. 4. Use reference material such as encyclopedias, atlas, etc. to compare & contrast two different regions. Also use the series of books on the states. | <p>II</p> |
|--|-----------|

resources are not equally

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Discipline Area

Language Arts

Subject

Critical Writing

Natural

Problem Orientation

Resources

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

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4. Use reference material such as encyclopedias, atlas, etc. to compare & contrast two different regions. Also use the series of books on the states.

II. Outside Resource and Community Activities

1. Invite a foreign exchange student to speak to class on how people in his country have adjusted to their environment.
2. Have agriculture agent speak to class on how a farmer within the state adjusts his crop growth to water supply, soil quality, & weather conditions.
3. Have students interview people within the community to see how they are dependent on the geographic conditions of the area.

Materials	Continued and Additional Suggested Learning Experiences
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Project I-C-E

ESEA Title III - 59-70-0135-1

C 7. Factors such as facilitating
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N transportation, economic conditions,
C
E population growth, and increased lei-
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T sure time have a great influence on
changes in land use and centers of population density.

Discipline Area Language

Subject Creati

Problem Orientation Por

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING

Cognitive: Through creative writing, the child will demonstrate and project 4 changes in the balance of nature necessary if America's population doubled.
Affective: The student will defend his position on the harmful effects of over-population.

Skills to be Learned
Critical thinking of necessary balance in nature, and creative thinking of result of imbalance.
Research of overpopulated areas would be essential.

- I. Student-Centered in class activity
- A. Class
 1. Discuss what would happen if a local city doubles in population
 - a. sacrificed wants.
 - b. sacrificed needs.
 - c. sanitation problems.
 2. Plant 2 communities of radish seeds. Observe growing patterns. Discuss how people would react similarly to the plants.
 3. Discuss what would happen to the natural resources.

has facilitating

, economic conditions,

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and use and centers of population density.

Discipline Area Language Arts

Subject Creative Writing

Problem Orientation Population Grade 6

OBJECTIVES

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SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
- A. Class
1. Discuss what would happen if a local city doubles in population
 - a. sacrificed wants.
 - b. sacrificed needs.
 - c. sanitation problems.
 2. Plant 2 communities of radish seeds. Observe growing patterns. Discuss how people would react similarly to the plants.
 3. Discuss what would happen to the natural resources.

- II. Outside Resource and Community Activities
- A. Library
1. Locate books about countries with over-population (China, India).
 2. Locate books about pioneer days and the environment.
- B. Community
1. Visit sanitation department to find out about present population problems. Visit other community helpers and have them discuss the importance of their job.
 2. Visit a farm with a conservation officer to discuss the intricate balance of nature.

Resource and Reference Materials

Continued and Additional Suggested Le

Publications:

Excerpts from Silent Spring
Rachael Carson

or

Since Silent Spring

Audio Visual:

Movie

#4050 Food, clothing, and
shelter in their environment.
Color. B.A.V.I. p.9.

Community:

Materials

Continued and Additional Suggested Learning Experiences

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nt.

C 8. Cultural, economic, social and
O
N political factors determine status
C
E of man's values and attitudes
P
T toward his environment.

Discipline Area _____ Language _____
Subject _____ Language _____
Problem Orientation _____ Attitude _____

BEHAVIORAL OBJECTIVES

Cognitive: Through the study of various forms of communication including verbal & nonverbal, each student will list a minimum of 4 ways that cultural, economic, social and political factors determine man's values and attitudes toward his environment.
Affective: Students will investigate the fact that many factors influence man's attitude toward his environment and man expresses these through all forms of communication which we will divide into 2 groups, verbal and nonverbal.

Skills to be Learned
Discussion
Interview

SUGGESTED LEARNING EXPERIENCES

- | I. Student-Centered in class activity | II. Out of class activity |
|--|---|
| 1. Oral discussion listing all the different ways that man can communicate - including those not in use any-more ex.-smoke signals. Have students list on board. | 1. Communication by using the telephone, radio, television, etc. |
| 2. Evaluate student's work through an oral test (Verbal Communication) listing the different attitudes and values toward environment that they became aware of through their interviews. | 2. Interview people in the community about their attitudes and values toward the environment. |

nomic, social and
 s determine status
 and attitudes
 onment.

Discipline Area Language Arts
 Subject Language Arts
 Problem Orientation Attitudes Grade 6

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
<p> h the orms of uding , each a minimum tural, nd polit- mine man's es toward ts will ct that ence man's s environ- sses these of communi- ll divide bal and </p>	<p> I. Student-Centered in class activity 1. Oral discussion listing all the different ways that man can communicate - including those not in use any-more ex.-smoke signals. Have students list on board. 2. Evaluate student's work through an oral test (Verbal Communication) listing the different attitudes and values toward environment that they became aware of through their interviews. </p>	<p> II. Outside Resource and Community Activities 1. Have students interview 3 to 5 people of different backgrounds on their feelings, values & attitudes toward their environment and their concern in maintaining a balanced ecosystem. 2. Demonstrate to students by taking a field trip to a local park or recreation area & without verbal communication but by actions, try to do something specific such as picking up litter, etc. They can influence in a favorable way the actions of others. </p>
<p>ed</p>		

Resource and Reference Materials
Publications:

Continued and Additional Suggested L

Audio-Visual:

Community:

Materials	Continued and Additional Suggested Learning Experiences
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C 9. Man has the ability to manage,
O
N manipulate, and change his
C
E environment.
P
T

Discipline Area Language

Subject Drama

Problem Orientation Concept

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES
<p><u>Cognitive:</u> Through dramatization, each student will demonstrate one specific need of man & one specific want that is not essential to life.</p> <p><u>Affective:</u> The student will distinguish between the wants & needs of man.</p>	<p>I. Student-Centered in class activity</p> <p>A. Classroom activity</p> <ol style="list-style-type: none"> 1. Discuss the differences between wants & needs. 2. List on board the items that are man's wants & those that are man's needs. 3. Discuss ways in which man has damaged or destroyed his environment through striving for luxuries. 4. Compare primitive man to modern man & point out differences in life style. 5. Assignment: From the list of wants & needs have the students select one of each to dramatize before the group.
<p><u>Skills to be Learned</u></p> <p>Dramatization</p> <p>Discussion</p> <p>Comparing</p>	

ability to manage,

change his

Discipline Area Language Arts

Subject Drama

Problem Orientation Conservation Grade 6

OBJECTIVES

Through drama-
student will
specific
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essential

student will
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man.

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

A. Classroom activity

1. Discuss the differences between wants & needs.
2. List on board the items that are man's wants & those that are man's needs.
3. Discuss ways in which man has damaged or destroyed his environment through striving for luxuries.
4. Compare primitive man to modern man & point out differences in life style.
5. Assignment: From the list of wants & needs have the students select one of each to dramatize before the group.

II. Outside Resource and Community Activities

A. Enrichment & Expanded Activities

1. Groups will volunteer & develop skits, one dealing with life with only needs and one with depicting life with abundant wants. Compare to life style.
2. Discuss finding a balance between wants & needs to safe guard our environment.

B. Library

1. Select material on various societies & compare to our society.
2. Read about pioneers & compare their wants to the wants of society today.

Resource and Reference Materials
Publications:

Continued and Additional Suggested

Audio-Visual:

Film:

Neighbors, as described in
An Annotated Checklist of 200
Short Films for Writing Classes,
available from Ill. Assoc. of
Teachers of English, Urbana,
Ill. for 35¢

Community:

Materials	Continued and Additional Suggested Learning Experiences
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200
 classes,
 . of
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C 10. Short-term economic gains may

N produce long-term environmental

C losses.

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P

T

Discipline Area Language

Subject Drama

Problem Orientation Land

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING EXP

Cognitive: Through dramatization the child will demonstrate ways in which man's desire for economic gains have produced long-term environmental losses.
Affective: The child will offer evidence of the need for the preservation of our natural resources.

I. Student-Centered in class activity
 A. Classroom
 1. Have each student select an area they have discovered man has sacrificed his environment for economic gains. Child should stress how man's greed has affected his environment.

Skills to be Learned

Communication
 Dramatization

omic gains may

Environmental

Discipline Area Language Arts

Subject

Drama

Problem Orientation Land Use Grade 6

TIVES

SUGGESTED LEARNING EXPERIENCES

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I. Student-Centered in class activity

A. Classroom

1. Have each student select an area they have discovered man has sacrificed his environment for economic gains. Child should stress how man's greed has affected his environment.

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II. Outside Resource and Community Activities

A. Outside classroom

1. Take a field trip to a farm land that has been over farmed & crops are poor.

2. Take a field trip to Fox River to observe the polluted areas & discuss how man's demands have hampered the natural beauty of its river.

3. Take pictures of areas that have been hampered by man's desire for economic gains.

B. Library Study

1. Have students research in library for ways in which man has created long-term losses by economic gains.

2. Have game warden, county forester or water dept. head talk to class on ways man's greed for economic gains (cont.)

Resource and Reference Materials
Publications:

Newspaper clippings on ways man
has cut forest, overused farm
land
Pamphlets from county agent on
poor agricultural practices
Conservation magazine

Continued and Additional Suggested
II. (cont.)

has hampered their particular f

Audio-Visual:

Community:

Materials

Continued and Additional Suggested Learning Experiences

II. (cont.)

has hampered their particular field.

ways man
ed farm

gent on
tices

C 11. Individual acts, duplicated
 O
 N or compounded, produce significant
 C
 E environmental alterations over time.
 P
 T

Discipline Area Language A

Subject Writing

Problem Orientation Pollut

ESEA Title III - 59-70-0135-1 Project I-C-E

BEHAVIORAL OBJECTIVES

Cognitive: Using developed slides, the students will write a photographic essay to show how man has marred the beauty of nature.
Affective: Students will criticize actions of themselves and others when they observe an ugly area.

Skills to be Learned
 Composing a good picture
 Writing narrative
 Oral reading for taping

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity
 1. Discuss beautiful or attractive places students have seen. Discuss others that are ugly and unattractive. What caused the ugliness?

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Discipline Area Language Arts

Subject Writing

Problem Orientation Pollution Grade 6

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
Developed s will c an has f s will f rs n ugly	<p>I. Student-Centered in class activity</p> <p>1. Discuss beautiful or attractive places students have seen. Discuss others that are ugly and un-attractive. What caused the ugliness?</p>	<p>II. Outside Resource and Community Activities</p> <p>1. Plan a photographic field trip. Take pictures (slides) of lovely natural scenes. Also take some pictures (slides) of places where man has polluted or marred the countryside. (Students may take notes to help recall the pictures they've taken). After the pictures are developed and the choice one's selected, the students will write narration to accompany the slides. (Students may bring slides they have at home or may take pictures of pictures.) The narrative should be put on tape and the tape played as the slides are shown. To introduce the part of the tape on lovely scenes, the song "America the Beautiful" could be sung. The song "Pollution" could be sung to introduce the part on the ugly scenes.</p>
d cture ping		

Resource and Reference Materials
Publications:
Magazines with colorful scenes

Continued and Additional Suggested

Audio-Visual:

Camera

Tape recorder

Community:

Local photographer

Materials	Continued and Additional Suggested Learning Experiences
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C 12. Private ownership must be re-

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N garded as a stewardship and should

C

E not encroach upon or violate

P

T the individual right of others.

Discipline Area Language

Subject

Letter

Problem Orientation E

ESEA Title III - 59-70-0135-1 Project I-C-E

BEHAVIORAL OBJECTIVES

Cognitive: Through letter writing and summarizing, the student will list six ways in which one element in the ecosystem has caused an imbalance affecting and violating the rights of others.
Affective: Students will suggest to various sources, ways to help guard against any manipulation or man-made changes being committed against elements of the ecosystem.

Skills to be Learned

Developing the skill of concise and properly written letters.

Developing the skill of summarizing--being able to pick out the important points each author is making in what they have read; also, summarizing material that they have heard.

SUGGESTED LEARNING

I. Student-Centered in class activity

A. Write various agencies of the Federal and State governments in regard to how man has destroyed the balance of the ecosystem.

B. Bring papers and magazines and books with articles on how rights have been violated.

C. When material from government agencies is received, have students compile and summarize important points made by the agencies.

1. Several students could write these on a master and run off copies for all students.

D. As a follow-up to these activities, students could write letters to various government officials with their sug-
gestions and also ask them what they could do to help guard against any manipulation or man-made (cont.

ownership must be re-

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Discipline Area Language Arts

Subject

Letter Writing & Summarizing

Problem Orientation Ecosystem

Grade 6

GENERAL OBJECTIVES

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

A. Write various agencies of the Federal and State governments in regard to how man has destroyed the balance of the ecosystem.

B. Bring papers and magazines and books with articles on how rights have been violated.

C. When material from government agencies is received, have students compile and summarize important points made by the agencies.

1. Several students could write these on a master and run off copies for all students.

D. As a follow-up to these activities, students could write letters to various government officials with their sug-
gestions and also ask them what they could do to help guard against any manipulation or man-made (cont.)

II. Outside Resource and Community Activities

C 12. Private ownership must be re-

O
N garded as a stewardship and should

C
E not encroach upon or violate

P
T the individual right of others.

Discipline Area Langu

Subject Criti

Problem Orientation P

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING

Cognitive: The child will criticize a city and a rural community's needs for pollution control and how people are interdependent upon people within the community.
Affective: The child will criticize the needs for pollution control and interdependency within communities will be shown through his critical writing.

Skills to be Learned

Researching
Observing through actual experience
Interviewing
Critical thinking

I. Student-Centered in class activity

A. Students can write the Chamber of Commerce in cities located on or near the Fox River. Students can also write a conservation agent, county forester, agriculture agent, to gain information about pollution in particular areas.

B. Develop a bulletin board on comparison of city and rural community pollution problems.

C. Have city planner, water sewage director, or city sanitary worker visit the class and explain pollution problems within the city.

D. Ask county forester, agent or conservationist to visit class and explain pollution problem in a rural community.

E. Have students write a critical analysis by comparison of problems that affect a city and rural community.

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Discipline Area Language Arts

Subject Critical Writing

Problem Orientation Pollution Grade 6

OBJECTIVES

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

- A. Students can write the Chamber of Commerce in cities located on or near the Fox River. Students can also write a conservation agent, county forester, agriculture agent, to gain information about pollution in particular areas.
- B. Develop a bulletin board on comparison of city and rural community pollution problems.
- C. Have city planner, water sewage director, or city sanitary worker visit the class and explain pollution problems within the city.
- D. Ask county forester, agent or conservationist to visit class and explain pollution problem in a rural community.
- E. Have students write a critical analysis by comparison of problems that affect a city and rural community.

II. Outside Resource and Community Activities

- A. Take a bus trip through a city on the Fox River such as Appleton, Green Bay, Kaukauna, or Kimberly to see the effect of pollution in a city area.
- B. Take a field trip to a farm area where erosion and pollution have taken place.

Resource and Reference Materials
Publications:

Newspaper articles
Pamphlets published by Chamber of
Commerce within State of Wisconsin
or Department of Natural Resources,
Conservation, or Forestry

Audio-Visual:

Community:

Continued and Additional Sugg

ce Materials

Continued and Additional Suggested Learning Experiences

y Chamber of
e of Wisconsin
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PROJECT I-C-E

Episode Evaluation Form (Reproduce or duplicate as needed)

In commenting on each episode used in your class, you may wish to format. Please feel free to adapt it and add more pages. Let us know comments - negative and positive.

I. Behavioral Objectives

A. Cognitive:

B. Affective:

II. Skills Developed

III. Suggested Learning Experiences

A. In Class:

B. Outside & Community Activities

IV. Suggested Resource & Reference Materials (specific suggestions & comments)

PROJECT I-C-E

Episode Evaluation Form (Reproduce or duplicate as needed)

Each episode used in your class, you may wish to duplicate this suggested form to adapt it and add more pages. Let us know all your critiques and positives.

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Project I - C - E

INSTRUCTION - CURRICULUM - ENVIRONMENTAL

ED055919

A SUPPLEMENTARY PROGRAM FOR ENVIRONMENTAL EDUCATION

DISCIPLINE AREA Language Arts GRADE 7

Produced under Title III E.S.E.A.
PROJECT I-C-E
Serving Schools in CESA's 3-8-9
1927 Main Street
Green Bay, Wisconsin 54301
(414) 432-4338

Robert
Robert
George

- E

INSTRUCTION - CURRICULUM - ENVIRONMENT

Y PROGRAM FOR ENVIRONMENTAL EDUCATION

A Language Arts GRADE 7

Title III E.S.E.A.

s in CESA's 3-8-9

et

consin 54301

Robert Warpinski, Director
Robert Kellner, Asst. Director
George Howlett, EE Specialist

PREFACE

If you wish to excite students about their environment, help of over a hundred teachers, year long meetings, a summer work ecologists, this guide means realistic, developed aid for you which have directed teachers in writing and editing this guide.

1. This guide is supplementary in nature and the episodes are designed to plug into existing, logical course content.
2. Each page or episode offers suggestions. Since you know you will have to adapt, adopt, or use. By design, the range of suggestion, experimentation and usage are even wider. Many episodes are self-explanatory and others can be changed in part or developed more keenly over time. Possibilities allow you to explore.
3. Now we urge that you try the episodes and suggested learning plan. The reasons are simple. No guide has all the answers unless viewed in the context of your classroom situation. Give it a triple reading, check over the resources listed, prime your students, and seek help. The Project personnel and knowledge page stand ready to aid your efforts. Feel free to ask.
4. The Project Resource Materials Center serves all CESA 3, 8 and private. We will send available materials pre-paid. Call for a visit. Phone 432-4338.
5. Check often the Project ICE Bibliography in your school library and Center materials. Please offer suggestions, comments, or requests. Service may grow. Let's help each other.
6. Involve yourself with the guide by reacting to it with suggestions on the episode pages or use the attached evaluation form. Submitted in late May next year and will be used in our revision. Reactions and suggestions--negative and positive. Please note that in the episodes may refer to specific, local community resources, cases, individual school districts and teachers will have substitutes. A list of terms pertinent to the episodes is below.
7. Ecologists and other experts have simplified the issue--survival. Creation's beauty and complexity--often noted as the work of God and human energy to save. A year's work by a hundred of you is a gesture. Without you, their work will crumble, and so might ours. Let us live to think, feel, and act in harmony with our world.

1. Cognitive means a measurable mental skill, ability, or power.
2. Affective refers to student attitudes, values, and feelings.
3. APWI means Acceptable Performance Will Include (labels and criteria).
4. EPA - Environmental Problem Area.

PREFACE

Excite students about their environment, help is ready. Thanks to the efforts of teachers, year long meetings, a summer workshop, university consultants and this guide means realistic, developed aid for you. Please note the following ideas and teachers in writing and editing this guide.

Supplementary in nature and the episodes are designed--at appropriate instances to existing, logical course content.

Each episode offers suggestions. Since you know your students best, you decide what to use, or use. By design, the range of suggestions is wide; your chances for experimentation are even wider. Many episodes are self-contained, others open-ended, still others changed in part or developed more keenly over a few weeks. These built-in episodes allow you to explore.

As you try the episodes and suggested learning experiences but please pre-plan your lessons are simple. No guide has all the answers and no curriculum will work in the context of your classroom situation. Thus, before trying an episode, do some reading, check over the resources listed, make mental and actual notes, ask questions, and seek help. The Project personnel and teachers listed on the back page stand ready to aid your efforts. Feel free to ask their help in pre-planning. The Resource Materials Center serves all CESA 3, 8, and 9 area schools--public and private. We will send available materials pre-paid. Call for any help, materials, or to 312-4338.

Project ICE Bibliography in your school library for available Resource Materials. Please offer suggestions, comments, or advice--at any time--so that this work will help each other.

Work with the guide by reacting to it with scratch ideas, notes, and extended responses on the episode pages or use the attached evaluation format, which will be collected May next year and will be used in our revisions. We sincerely want your suggestions--negative and positive. Please note that some resources listed may refer to specific, local community resources or conditions. In such cases, local school districts and teachers will have to adopt local or available substitutes. A list of terms pertinent to the episodes is below.

Other experts have simplified the issue--survival--yours, mine, our students, the complexity--often noted as the work of a genius--will take our genius to save. A year's work by a hundred of your fellow teachers is a saving to you, their work will crumble, and so might we all--literally. Instead, think, feel, and act in harmony with our world.

Editorial Board

Means a measurable mental skill, ability, or process based on factual data. Refers to student attitudes, values, and feelings.

Acceptable Performance Will Include (labels a cognitive or mental performance.)
Mental Problem Area.

ACKNOWLEDGEMENTS: The following teachers and consultants participated in the Supplementary Environmental Education Program

CESA #3

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David Miskulin, Goodman
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CESA #8

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John Little, Winneconne
Gordon Rohloff, Oshkosh
William Schaff, St. Joseph
Doris Stehr, Mt. Calvary (L)
Carolyn Shills, New London
Sister Dorothy, Xavier
Clarence Trentlage, Freedom
Mike Hawkins, Xavier
Beth Hawkins, Xavier
Ed Patschke, Menasha
Connie Peterson, St. Martin (L)
Dallas Werner, Kaukauna
Ron Schreier, Omro

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S: The following teachers and consultants participated in the development of the Supplementary Environmental Education Guide:

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Oconto
Marinette
, Coleman
Lena
. James (L)
Oshkosh
, Suring
Ath. Central
Ondul
Goodman
Oshkosh
Niagara
Gillett
Oshkosh
Marinette
Oshkosh, White Lake
White Lake
Oshkosh
Gillett
Gillett

Lowell Baltz, Weyauwega
William Behring, Lourdes
David Bell, Neenah
Marie Below, Clintonville
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Mike Hawkins, Xavier
Beth Hawkins, Xavier
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Connie Peterson, St. Martin (L)
Dallas Werner, Kaukauna
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Carmella Blecha, Green Bay
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Russ Hanseter, Seymour
Paul Kane, Ashwaubenon
Roy Lukes, Gibraltar
Sister Anna, St. Philips
Jim Maki, Sturgeon Bay
Joyce Mateju, Algoma
Richard Minten, W. DePere
Gloria Morgan, Linsmeier Private
George Pederson, Southern Door
Alan Schuh, Pulaski
Thomas Weyers, Cathedral
Ruth Windmuller, Green Bay
James Wiza, DePere
John Torgerson, Kewaunee
Benjamin Roloff, Howard-Suamico
Greg Schmitt, Cathedral
John DeWan, Green Bay
Emmajean Harmann, Sevastopol
Ray Gantenbein, Green Bay
David Bartz, Sturgeon Bay
John Hussey, Green Bay
Sister Barbara, St. Bernard

Marinette
Oshkosh, UW-Marinette

Edna Jean Purcell, OSU
David West, Lawrence U.

Robert Cook, UWGB
Dennis Bryan, UWGB

C 1. Energy from the sun, the basic source
 O
 N of all energy, is converted through
 C
 E plant photosynthesis into a form all
 P
 T living things can use for life pro-
 cesses.

Discipline Area Lar
 Subject Lib
 Problem Orientation

BEHAVIORAL OBJECTIVES

Cognitive: Given an incomplete food chain, the student, through application of location skills, will be able to place himself as a link in the chain of life, and place the sun as the main energy source.

Affective: Using basic research skills through the use of media, the students will support the "suns' energy cycle."

Skills to be Learned

Location skills:

Use of card catalogue
 Use of the reader's guide
 Films-Film loops-Film strips

SUGGESTED LEARNING

I. Student-Centered in class activity

A. Class

1. Discuss the food chain of algae to the sun.
2. Use string to build a "web of life" which shows how plants and flowers and bugs and man all need the sun.

from the sun, the basic source

energy, is converted through

photosynthesis into a form all

organisms can use for life processes.

Discipline Area Language Arts

Subject Library

Problem Orientation Energy Grade 7

LEARNING OBJECTIVES

Given an incom-
plete main, the
through applica-
tion skills,
to place him-
self in the
context, and place
the main energy
using basic
skills through
media, the
support
energy cycle."

Learned
skills:
catalogue
reader's guide
books-Film

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

A. Class

1. Discuss the food chain of algae to the sun.
2. Use string to build a "web of life" which shows how plants and flowers and bugs and man all need the sun.

II. Outside Resource and Community Activities

A. Library

1. Locate books on Ecology showing food chains.
2. Locate the Second law of thermo-dynamics.
3. Find 3 current articles dealing with destruction of eco-systems.
4. Read articles dealing with the conversion of solar energy.

B. Community

1. Field, ecology trips to discover food chains.

Resource and Reference Materials
Publications:

Continued and Additional Suggested

Life Magazine, Ecology
Conservation (pamphlet)
Cornell University Press

Audio-Visual:

Community:

County Soil Conservation
Office - Court House
Agriculture Extension Agent

Materials

Continued and Additional Suggested Learning Experiences

S

ent

C 2. All living organisms interact among
 O
 N themselves and their environment,
 C
 E forming an intricate unit called an
 P
 T ecosystem.

Discipline Area Language
 Subject Speaking
 Problem Orientation Ecos

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES
<p><u>Cognitive:</u> The student will compile a list of ideas through the technique of brainstorming, concerning the question: What ways can man live in harmony with nature in the 20th century?</p> <p><u>Affective:</u> Through technique of brainstorming the student will suggest that the manipulation of one element in nature affects all elements.</p>	<p>I. Student-Centered in class activity</p> <p>A. Present to the group the techniques of getting ideas through "throwing out" ideas quickly and "freewheeling" to get ideas on the topic.</p> <p>B. Form groups of five. Each group with a tape recorder or paper.</p> <p>C. From chairman's reports eliminate all lesser important ideas through the use of the tape recorder.</p> <p>D. Compile a final list of selected ideas.</p>
<p><u>Skills to be learned</u></p> <p>Brainstorming</p> <p>List-making</p>	

ing organisms interact among

and their environment,

intricate unit called an

Discipli Area Language Arts

Subject Speaking - Brainstorming

Problem Orientation Ecosystem Grade 7

AL OBJECTIVES

he student will
t of ideas
technique of
, concerning
What ways can
armony with
20th century?
through tech-
nstorming the
suggest that
ion of one
ture affects

learned

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

- A. Present to the group the techniques of getting ideas through "throwing out" ideas quickly and "freewheeling" to get ideas on the topic.
- B. Form groups of five. Each group with a tape recorder or paper.
- C. From chairman's reports eliminate all lesser important ideas through the use of the tape recorder.
- D. Compile a final list of selected ideas.

II. Outside Resource and
Community Activities

Resource and Reference Materials	Continued and Additional Suggeste
<p><u>Publications:</u></p> <p><u>Group Dynamics</u> <u>A Source Book for Crative Thinking,</u> Sidney Parnes & H. Harding, editors; Charles Scribner's Sons, publisher; New York.</p> <p><u>Audio-Visual:</u></p> <p><u>Community:</u></p>	

e Materials

Continued and Additional Suggested Learning Experiences

ve Thinking,
ding,
ner's Sons,

C 3. Environmental factors are limiting
 O
 N on the numbers of organisms living
 C
 E within their influence, thus, each
 P
 T environment has a carrying capacity.

Discipline Area _____

Subject _____

Problem Orientation _____

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING ACTIVITIES
<p><u>Cognitive:</u> When a list of man's needs are established, the student will show by class discussion evidence of man's possible over-use and mis-use of these needs.</p> <p><u>Affective:</u> Attempting to locate a delicate line between what man needs, and what he thinks he needs, the student will submit what he thinks are apparent discrepancies in these needs.</p>	<p>I. Student-Centered in class activity</p> <ol style="list-style-type: none"> 1. Develop with the students through individual research and compilations a list of man's basic needs 2. Taking the list of basic needs (unique in your class begin a critical analysis of each, as to its degree as a need and its actual degree of use. (Is it being mis-used, over-used, etc?) 3. Form debate teams either formal or informal. Allow students to form lines along that which they believe as much as possible. One team defending a given need itself, perhaps, or its use or misuse.
<p><u>Skills to be Learned</u></p> <p>Research skills</p> <p>Group communication</p> <p>Critical analysis</p> <p>Speaking activities</p> <p>Brainstorming in small groups</p>	

mental factors are limiting

bers of organisms living

ir influence, thus, each

t has a carrying capacity.

Discipline Area

Language Arts

Subject

Debate

Problem Orientation Carry Capacity Grade 7

GENERAL OBJECTIVES

When a list of
are established,
will show by
sion evidence
sible over-
use of these

Attempting to
licate line
man needs,
thinks he
tudent will
he thinks

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ese needs.

Learned
ills
nication
alysis
ivities
g in small

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. Develop with the students through individual re-search and compilations a list of man's basic needs.
2. Taking the list of basic needs (unique in your class) begin a critical analysis of each, as to its degree as a need and its actual degree of use. (Is it being mis-used, over-used, etc?)
3. Form debate teams either formal or informal. Allow students to form lines along that which they believe as much as possible. One team defending a given need itself, perhaps, or its use or misuse.

II. Outside Resource and Community Activities

Resource and Reference Materials	Continued and Additional Suggested
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Publications:

Books:

Science encyclopedias
textbooks

Patterns of Living, Lyons
and Carnahan

Discussion & Debate, National
Textbook Co.

Speaking By Doing, National
Textbook Co.

Audio-Visual:

Community:

Materials

Continued and Additional Suggested Learning Experiences

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ESEA Title III - 59-70-0135-1 Project I-C-E

C
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N
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P
T

4. An adequate supply of pure water
is essential for life.

Discipline Area
Subject
Problem Orientation

BEHAVIORAL OBJECTIVES

Cognitive: After viewing the film "The Gifts", field trip and personal activities, students will discuss the various types of water pollution.
Affective: Since an adequate supply of pure water is essential to life, hopefully the students will argue that water pollution is a serious problem.

Skills to be Learned

Discussion
Observation

SUGGESTED LEARNING ACTIVITIES

- I. Student-Centered in class activity
 1. After viewing the film "The Gifts", students will react orally by expressing the feeling that well up as a result of the film.
 2. They will discuss and become aware of ways that they pollute directly or indirectly.

adequate supply of pure water
essential for life.

Discipline Area Language Arts

Subject Discussion

Problem Orientation E.P.A. Water Grade 7

BEHAVIORAL OBJECTIVES

e: After viewing the
e Gifts", field trip
onal activities, stu-
ll discuss the vari-
s of water pollution.
e: Since an adequate
f pure water is essen-
life, hopefully the
will argue that
llution is a serious

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in
class activity

1. After viewing the film
"The Gifts", students
will react orally by
expressing the feelings
that well up as a result
of the film.

2. They will discuss and
become aware of ways
that they pollute direct-
ly or indirectly.

II. Outside Resource and
Community Activities

1. Students will visit
and observe local pollu-
tion areas and prepare
to discuss their findings
in class.

Resource and Reference Materials	Continued and Additional Suggest
<p><u>Publications:</u></p> <p><u>Lord Jim</u> by Joseph Conrad (Excerpts read by the teacher)</p> <p><u>Audio-Visual:</u></p> <p>Film: "The Gifts" Project I-C-E Resource Center 1927 Main Street Green Bay, WI 54301 or U.S. Department of Interior Federal Water Quality Assn. Office of Public Instruction</p> <p><u>Community:</u></p> <p>Field Trip</p>	

ce Materials

Continued and Additional Suggested Learning Experiences

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he teacher)

orce Center

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Interior
ty Assn.
struction

C 5. An adequate supply of clean air is
 O
 N essential because most organisms depend Discipline Area
 C
 E on respiration to supply the oxygen Subject
 P
 T needed to release the energy in their Problem Orientation
food.

BEHAVIORAL OBJECTIVES

Cognitive: Through critical reading the student will be able to distinguish between fact vs. opinion on adequate air supply through newspaper articles and labeling these articles as factual or opinionated.

Affective: The student submits that critical reading is a method which demonstrates that all material read in newspapers is not factual but in many cases, is the opinion of an individual which is mostly prejudiced in one form or other.

Skills to be Learned

Distinguish factual material on air pollution from a writer's opinion.

Effective critical reading is analyzing and categorizing material.

SUGGESTED LEARNING

- I. Student-Centered in class activity
 1. Bring to class enough local newspapers that each student will have two to read and look for appropriate articles.
 2. Teacher will xerox several articles that demonstrate opinion and articles that demonstrate fact to develop student's awareness of the differences that are existent.
 3. After reading articles on air pollution, each student will write a paragraph expressing his opinion of air pollution as it exists in his community.
 4. Students will then research factual material on air pollution and write a paragraph that is based on pure facts.
 5. Class discussion held on which type paragraph students found most difficult to write and why. Each student will---

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st organisms depend

pply the oxygen

he energy in their

Discipline Area Lanugage Arts

Subject

Criterial Reading-Writing

Problem Orientation E.P.A. Air Grade 7

CTIVES

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SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
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 2. Teacher will xerox several articles that demonstrate opinion and articles that demonstrate fact to develop student's awareness of the differences that are existent.
 3. After reading articles on air pollution, each student will write a paragraph expressing his opinion of air pollution. as it exists in his community.
 4. Students will then re-search factual material on air pollution and write a paragraph that is based on pure facts.
 5. Class discussion held on which type paragraph students found most difficult to write and why. Each student will---

- II. Outside Resource and Community Activities
 1. Have a newspaper reporter or editor speak to the class on writing editorials (which are that editor's opinion).
 2. As a presentation for the factual side, have a teacher in the field of science present facts on air pollution.

(cont.)

Resource and Reference Materials
Publications:
Newspaper articles

Continued and Additional Suggestions

I. (cont.)
read orally both of his paragraphs
of the class to share opinions

Audio-Visual:

Community:

Have newspaper writer
or editor visit class.

erials

Continued and Additional Suggested Learning Experiences.

I. (cont.)

read orally both of his paragraphs which will enable all of the class to share opinions and facts on air pollution.

C 6. Natural resources are not equally
O
N distributed over the earth or over
C
E time and greatly affect the geographic
P
T conditions and quality of life.

Discipline Area _____ Lang _____
Subject _____ Grou _____
Problem Orientation _____ Reso _____

BEHAVIORAL OBJECTIVES

Cognitive: After a buzz session, students will formulate conclusions on the issue that 6 environmental changes made by man may damage plants and animals & upset the ecological balance.
Affective: The student should promote the beauty of a pond and a sense of responsibility for its preservation.

Skills to be Learned
Discussion
Buzzing

SUGGESTED LEARNING EXPERIENCES

- | I. Student-Centered in class activity | II. |
|---|--------|
| 1. Students will read the story "Walden's Pond" by Thoreau; then randomly place children in groups of 3 or 4 & have them "buzz" for about 10 minutes about the things Thoreau enjoyed during his visit to Walden Pond. Instruct each group to formulate & write down statements made--accept <u>all</u> statements. Have a master list of the children's statements typed & distribute copies to the class the following day. The initial statements are discussed, refined, reworded, retyped & copies are given to group members to help them formulate ideas for another buzz session. The students could follow the same procedure to answer the question, "What would happen to the plant & animal life if the engineers planning a new highway decide to drain Walden Pond?" At the end | C
1 |
- (Cont.)

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resources are not equally

over the earth or over

ly affect the geographic

quality of life.

Discipline Area

Subject

Problem Orientation

Language Arts

Group discussion

Natural

Resources

Grade

7

OBJECTIVES

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made by man
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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. Students will read the story "Walden's Pond" by Thoreau; then randomly place children in groups of 3 or 4 & have them "buzz" for about 10 minutes about the things Thoreau enjoyed during his visit to Walden Pond. Instruct each group to formulate & write down statements made--accept all statements. Have a master list of the children's statements typed & distribute copies to the class the following day. The initial statements are discussed, refined, reworded, retyped & copies are given to group members to help them formulate ideas for another buzz session. The students could follow the same procedure to answer the question, "What would happen to the plant & animal life if the engineers planning a new highway decide to drain Walden Pond?" At the end
(Cont.)

II. Outside Resource and Community Activities

1. Students visit a local pond individually or in a group, depending on the area.

Resource and Reference Materials
Publications:

Wide, Wide World of Literature,
"The Loon" by Henry David Thoreau

Continued and Additional Suggeste

I. (Cont.)
of the buzz session, each group
conclusions.

Audio-Visual:

Film:

World in a Marsh, Consulate
General of Canada Film
Library, 310 S. Michigan
Avenue, Chicago, Ill. 60604

Community:

High school biology teacher
(could talk to the class
about life in a pond.)

Materials Continued and Additional Suggested Learning Experiences

erature,
vid Thoreau

I. (Cont.)
of the buzz session, each group will report its
conclusions.

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60604

acher
ass
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C 7. Factors such as facilitating transportation,
 O
 N economic conditions, population growth, Discipline Area
 C
 E and increased leisure time have a great Subject
 P
 T influence on changes in land use and Problem Orientation
 centers of population density.

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING ACTIVITIES

Cognitive: After being involved in various sized groups, the student will choose the one size which has the best "lines" of communication.
Affective: Students will evaluate the fact that population size affects communication.

Skills to be Learned

Speaking
 Group discussion
 Panel discussion
 Problem Solving

I. Student-Centered in class activity
 A. The teacher divides the class into 2 groups & gives them a problem to discuss. After discussing for 5 minutes, divide the class into 3 groups to discuss another issue. Then will be a third regrouping into 5 groups & a final grouping into 10 groups, each of the 4 groups will have a different topic for discussion. One person from each of the final groupings will be chosen as a panelist. This group of 10 will discuss how the size of the group affects communication. Examples of topics: Should we have a candy machine in our school? Should we have students moving into the halls? What should we do about students who misbehave? What should we have for recess?
 Note: Illustration of groupings on next page.

such as facilitating transportation,

conditions, population growth, Discipline Area Language Arts

ased leisure time have a great Subject Discussion

on changes in land use and Problem Orientation Population Grade 7
f population density.

ORAL OBJECTIVES

SUGGESTED LEARNING EXPERIENCES

After being
various sized
student will
one size which
t "lines" of
on.

Students will
e fact that
size affects
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I. Student-Centered in class
activity

A. The teacher divides the class
into 2 groups & gives them a
problem to discuss. After dis-
cussing for 5 minutes, divide
the class into 3 groups to
discuss another issue. There
will be a third regrouping of
5 groups & a final grouping of
10 groups, each of the 4 groupins
will have a different topic for
discussion. One person from each
of the final groupings will be
chosen as a panelist. This panel
of 10 will discuss how the size
of the group affects communication.
Examples of topics: Should we have
a candy machine in our school?
Should we have students monitor
the halls? What should we do with
students who misbehave? Why don't
we have recess?

Note: Illustration of groupings
on next page.

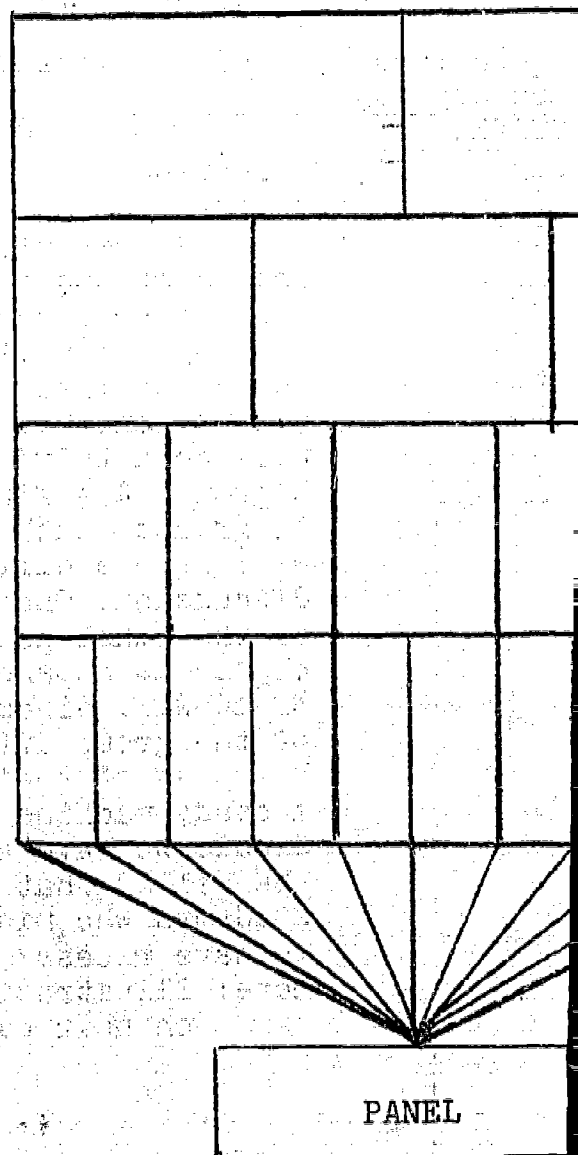
II. Outside Resource and
Community Activities

Resource and Reference Materials
Publications:
Speaking by Doing, National
Textbook Co.

Audio-Visual:

Community:

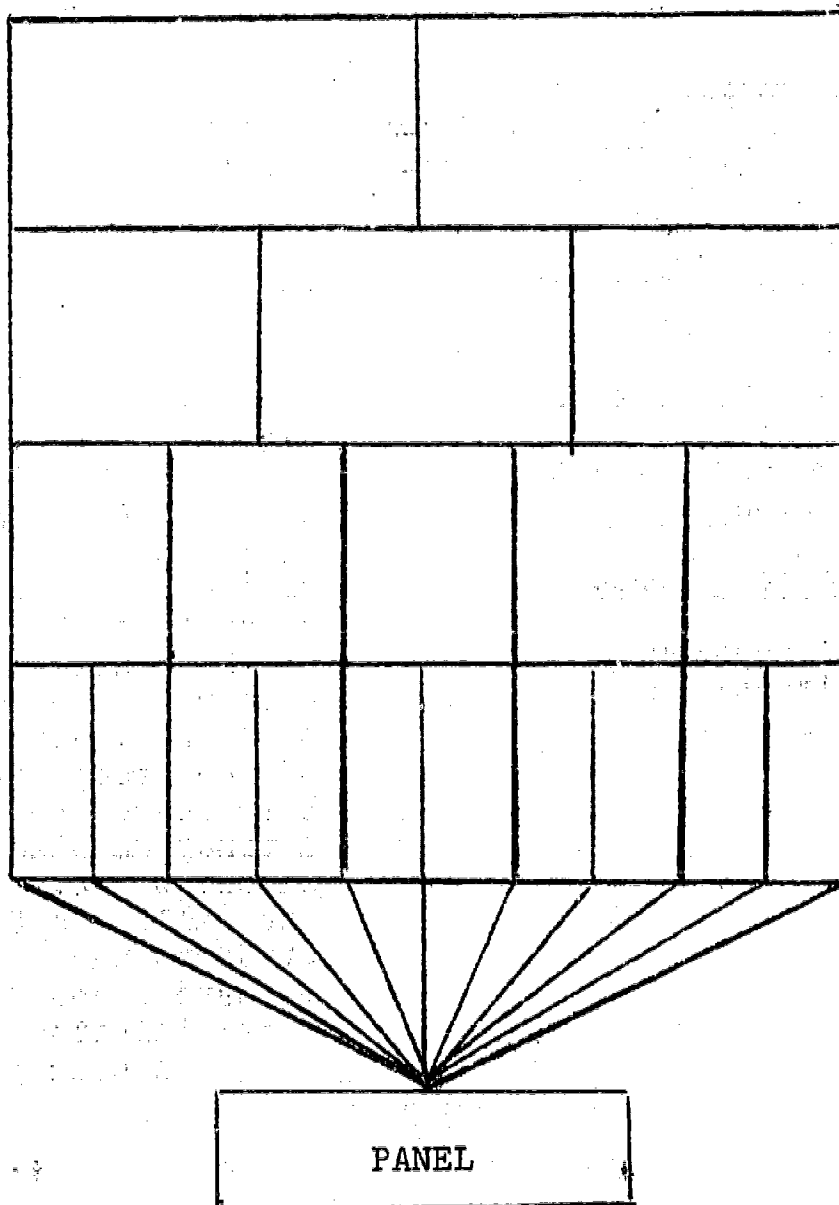
Continued and Additional Suggested I
 I. Illustration of groupings:



(One student from each of the f

Materials Continued and Additional Suggested Learning Experiences

I. Illustration of groupings:



(One student from each of the final groupings)

C 8. Cultural, economic, social, and
O
N political factors determine status
C
E of man's values and attitudes
P
T toward his environment.

Discipline Are

Subject

Problem Orient

ESEA Title III - 59-70-0135-1 Project I-C-E

BEHAVIORAL OBJECTIVES

Cognitive: Through a dialog narration, the students will creatively write how the cultures of the white man & Indian creates different values & attitude toward their environment.
Affective: The students will support the fact that different cultures will produce different values & attitudes.

Skills to be Learned
Writing narration in dialog form

SUGGESTED

- I. Student-Centered in cla activity
A. Class
1. Read the story, Li in the Forest by Co Richter.
2. Discuss True Son's attitude toward the man's civilization. are his attitudes a adopted Indian diff from his brother Go attitudes?
3. Write a dialog nar such as True Son & might have about th choices in the way life.

1
cultural, economic, social, and

all factors determine status

values and attitudes

his environment.

Discipline Area Language Arts

Subject Reading-narrative writing

Problem Orientation Attitudes Grade 7

BEHAVIORAL OBJECTIVES

Through a
narration, the
will creatively
the cultures
the man &
creates different
attitude toward
environment.

The students
port the fact
erent cultures
uce different
attitudes.

be Learned
narration in
form

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

A. Class

1. Read the story, Light
in the Forest by Conrad
Richter.
2. Discuss True Son's
attitude toward the white
man's civilization. How
are his attitudes as an
adopted Indian different
from his brother Gordy's
attitudes?
3. Write a dialog narration
such as True Son & Gordy
might have about their
choices in the way of
life.

II. Outside Resource and
Community Activities

Materials

Continued and Additional Suggested Learning Experiences

Society,
Wisconsin

tt

C 9. Man has the ability to manage,
 O
 N manipulate, and change his
 C
 E environment.
 P
 T

Discipline Area
 Subject
 Problem Orientation

BEHAVIORAL OBJECTIVES

Cognitive: The students will be able to analyze information obtained from two states & compare & contrast pollution control efforts in the form of a mobile or collage.
Affective: After writing to various cities in Wyoming & Wisconsin, the student will specify the effects of population & industry on the environment.

Skills to be Learned
 Comparing
 Contrasting
 Letter writing

SUGGESTED LEARNING ACTIVITIES

- I. Student-Centered in class activity
 - A. Classroom
 1. Students can write to Chamber of Commerces in different cities of Wyoming to find out what pollution control efforts are being undertaken in various cities in the state. (Wyoming chosen because of great population contrast.)
 2. Do the same in home & cities in Wisconsin.
 3. Hold an "open group discussion" to share and compare problems to population size & industry.
 4. Construct collage mobiles expressing a comparison & contrast of the two states efforts and problems.

the ability to manage,

and change his

Discipline Area Language Arts

Subject Letter Writing

Problem Orientation Pollution Grade 7

OBJECTIVES

Students
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gained from
compare &
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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

A. Classroom

1. Students can write to
Chamber of Commerces in
different cities of
Wyoming to find out what
pollution control efforts
are being undertaken in
various cities in the
state. (Wyoming chosen
because of great popu-
lation contrast.)
2. Do the same in home city
& cities in Wisconsin.
3. Hold an "open group
discussion" to share ideas
and compare problems due
to population size &
industry.
4. Construct collage
mobiles expressing a
comparison & contrast
of the two states efforts
and problems.

II. Outside Resource and
Community Activities

Resource and Reference Materials <u>Publications:</u>	Continued and Additional Suggested
<p><u>Audio-Visual:</u> Old magazines</p> <p><u>Community:</u> Art teachers Chamber of Commerce State Historical Society</p>	

C 10. Short-term economic gains may
O
N produce long-term environmental
C
E losses.
P
T

Discipline Area Language
Subject Critical
Problem Orientation Natural Resou

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES
<p><u>Cognitive:</u> Students will participate in class discussion & view a movie to help them write a description of how an action for short-term economic gain can produce long-term environmental loss.</p> <p><u>Affective:</u> Students will promote concern for avoiding such exploitation of our resources.</p>	<p>I. Student-Centered in class activity</p> <p>A. Classroom</p> <ol style="list-style-type: none"> 1. Class will discuss the meaning of short-term exploitation of natural resources & resulting long-term losses. 2. Students tell of examples they have seen or heard of in order to reinforce understanding. 3. While viewing movies, each student will make notes of short-term gains & long-term losses. 4. Each student will write a description of how short-term economic gains produce long-term losses in movies. 5. Discussion prior to viewing movies will draw on previous experiences of students.
<p><u>Skills to be Learned</u></p> <p>Critical thinking Observation Note taking Critical writing</p>	

economic gains may

rm environmental

Discipline Area Language Arts

Subject Critical Writing

Natural

Problem Orientation Resources Grade 7

OBJECTIVES

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a movie
e a
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term
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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

A. Classroom

1. Class will discuss the meaning of short-term exploitation of natural resources & resulting long-term losses.
2. Students tell of examples they have seen or heard of in order to reinforce understanding.
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4. Each student will write a description of how short-term economic gains produce long-term losses in movies.
5. Discussion prior to viewing movies will draw on previous experiences of students.

II. Outside Resource and
Community Activities

Resource and Reference Materials
Publications:

Continued and Additional Suggest

Audio-Visual:

Movie, Teamwork on the Potomac,
shows the environmental losses
produced by pollution &
degrading of the Potomac River.
Interstate Commission on the
Potomac River, 407 Global Bldg.
1025 Vermont Ave., NW,
Washington, D.C. 20005

Any other movie may be used
which shows long-term loss
resulting from short-term
exploitation.

Community:

Materials	Continued and Additional Suggested Learning Experiences
<p>tomac, losses</p> <p>River. the l Bldg.</p> <p>ed ss m</p>	

C 11. Individual acts, duplicated
 O or compounded, produce significant
 N environmental alterations over time.
 C
 E
 P
 T

Discipline Area Language

Subject English

Problem Orientation E

BEHAVIORAL OBJECTIVES

Cognitive Through creative writing, the student will be able to show by specific example the concept of cause, effect, and time.
Affective: The students will suggest other examples in their reading of man's activities that have changed the environment.

Skills to be Learned
 Creative writing
 Creative thinking
 Creative solutions
 Grammar
 Reading for information

SUGGESTED LEARNING

- I. Student-Centered in class activity
 - A. Discuss with class the kinds of activities man is engaged in that may, over a period of time, create problems with the environment.
 - B. Discuss what values caused these actions of man.
 1. Man vs. DDT
 2. Population explosion
 - C. Taking one of man's activities, project possible consequences in the future. (These writings should be based on some degree of authenticity).
 - D. Give a cause (industry) plus time (100 years), and discuss what could be the effect on the environment.
 - E. Writings done could be in the form of journals, documentaries, editorials, satire, and so on.

ESEA Title III - 59-70-0135-1 Project I-C-E

acts, duplicated

produce significant

alterations over time.

Discipline Area Language Arts

Subject English

Problem Orientation E. Alterations Grade 7

OBJECTIVES

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students will
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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

A. Discuss with class the kinds of activities man is engaged in that may, over a period of time, create problems with the environment.

B. Discuss what values caused these actions of man.

1. Man vs. DDT

2. Population explosion

C. Taking one of man's activities, project possible consequences in the future. (These writings should be based on some degree of authenticity).

D. Give a cause (industry) plus time (100 years), and discuss what could be the effect on the environment.

E. Writings done could be in the form of journals, documentaries, editorials, satire, and so on.

II. Outside Resource and Community Activities

Resource and Reference Materials

Continued and Additional

Publications:

Short stories about, or excerpts
from lives of great industrialists,
etc.

Biographies

Encyclopedias

Industrialists:

Henry Ford

Horard Hughes

John Deere

Audio-Visual:

Community:

e Materials

Continued and Additional Suggested Learning Experience

r excerpts
Industrialists,

C 12. Private ownership must be re-
 O garded as a stewardship and should
 N not encroach upon or violate
 C the individual right of others
 E
 P
 T

Discipline Area Language Arts
 Subject Letter Writing
 Problem Orientation Pollution

BEHAVIORAL OBJECTIVES

Cognitive: After writing to various cities in Wyoming and Wisconsin, the student through making a collage or mobile will show the effects of population and industry on environment.
Affective: The student will analyze information obtained from two states and compare and contrast pollution control efforts.

Skills to be Learned
 Comparing and contrasting
 Letter writing
 Interviewing

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. Students can write to Chamber of Commerce in Wyoming cities to find out what pollution control efforts are being undertaken in various cities in the state. (Wyoming chosen because of great population contrast)
2. Do the same in home city and cities in Wisconsin.
3. Hold an open group discussion to share ideas and compare problems due to population size and industry.
4. Construct collage, mobiles expressing a comparison and contrast of the two states efforts and problems.

II. Out-of-class activity
 Community

ESEA Title III - 59-70-0135-1 Project I-C-E

ownership must be re-
stewardship and should
upon or violate
al right of others

Discipline Area Language Arts
Subject Letter Writing
Problem Orientation Pollution Grade 7

OBJECTIVES

writing to
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SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
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 2. Do the same in home city and cities in Wisconsin.
 3. Hold an open group discussion to share ideas and compare problems due to population size and industry.
 4. Construct collage, mobiles expressing a comparison and contrast of the two states efforts and problems.

II. Outside Resource and Community Activities

Resource and Reference Materials
Publications:
State Historical Society

Continued and Additional Sup

Audio-Visual:

Community:
Art teachers
Chambers of Commerce

Reference Materials

Continued and Additional Suggested Learning Experiences

Society

PROJECT I-C-E

Episode Evaluation Form (Reproduce or duplicate as needed)

In commenting on each episode used in your class, you may wish format. Please feel free to adapt it and add more pages. Let us comments - negative and positive.

I. Behavioral Objectives

A. Cognitive:

B. Affective:

II. Skills Developed

III. Suggested Learning Experiences

A. In Class:

B. Outside & Community Activities

IV. Suggested Resource & Reference Materials (specific suggestions & comments)

PROJECT I-C-E

Episode Evaluation Form (Reproduce or duplicate as needed)

On each episode used in your class, you may wish to duplicate this suggested
model free to adapt it and add more pages. Let us know all your critiques and
negative and positive.

Objectives

oped

Learning Experiences

Community Activities

Source & Reference Materials
(Questions & comments)

Project I - C - E

INSTRUCTION - CURRICULUM - ENVIRONMEN

ED055919

A SUPPLEMENTARY PROGRAM FOR ENVIRONMENTAL EDUCATION

DISCIPLINE AREA Language Arts GRADE 8

Produced under Title III E.S.E.A.
PROJECT I-C-E
Serving Schools in CESA's 3-8-9
1927 Main Street
Green Bay, Wisconsin 54301
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Robert Warp
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George Howl

INSTRUCTION - CURRICULUM - ENVIRONMENT

FOR ENVIRONMENTAL EDUCATION

Arts GRADE 8

E.S.E.A.

3-8-9

301

Robert Warpinski, Director
Robert Kellner, Asst. Director
George Howlett, EE Specialist

PREFACE

If you wish to excite students about their environment, help is of over a hundred teachers, year long meetings, a summer workshop ecologists, this guide means realistic, developed aid for you. E which have directed teachers in writing and editing this guide.

1. This guide is supplementary in nature and the episodes are designed--to plug into existing, logical course content.
2. Each page or episode offers suggestions. Since you know your to adapt, adopt, or use. By design, the range of suggestions in mentation and usage are even wider. Many episodes are self-contained others can be changed in part or developed more keenly over a possibilities allow you to explore.
3. Now we urge that you try the episodes and suggested learning plan. The reasons are simple. No guide has all the answers unless viewed in the context of your classroom situation. They give it a triple reading, check over the resources listed, make prime your students, and seek help. The Project personnel and knowledge page stand ready to aid your efforts. Feel free.
4. The Project Resource Materials Center serves all CESA 3, 8, and private. We will send available materials pre-paid. Call for visit. Phone 432-4338.
5. Check often the Project ICE Bibliography in your school library Center materials. Please offer suggestions, comments, or advice service may grow. Let's help each other.
6. Involve yourself with the guide by reacting to it with scratch suggestions on the episode pages or use the attached evaluation collected in late May next year and will be used in our revisions reactions and suggestions--negative and positive. Please note in the episodes may refer to specific, local community resource cases, individual school districts and teachers will have to substitutes. A list of terms pertinent to the episodes is below.
7. Ecologists and other experts have simplified the issue--survival Creation's beauty and complexity--often noted as the work of a and human energy to save. A year's work by a hundred of your gesture. Without you, their work will crumble, and so might we let us live to think, feel, and act in harmony with our world.

1. Cognitive means a measurable mental skill, ability, or process.
2. Affective refers to student attitudes, values, and feelings.
3. APWI means Acceptable Performance Will Include (labels a component).
4. EPA - Environmental Problem Area.

PREFACE

cite students about their environment, help is ready. Thanks to the efforts of teachers, year long meetings, a summer workshop, university consultants and other means realistic, developed aid for you. Please note the following ideas for teachers in writing and editing this guide.

Supplementary in nature and the episodes are designed--at appropriate instances to existing, logical course content.

Each episode offers suggestions. Since you know your students best, you decide what to use. By design, the range of suggestions is wide; your chances for experimentation are even wider. Many episodes are self-contained, others open-ended, still changed in part or developed more keenly over a few weeks. These built-in challenges allow you to explore.

When you try the episodes and suggested learning experiences but please pre-planning are simple. No guide has all the answers and no curriculum will work in the context of your classroom situation. Thus, before trying an episode, read, check over the resources listed, make mental and actual notes, discuss, and seek help. The Project personnel and teachers listed on the acknowledgment stand ready to aid your efforts. Feel free to ask their help in pre-planning. The Resource Materials Center serves all CESA 3, 8, and 9 area schools--public and private. I send available materials pre-paid. Call for any help, materials, or to 2-4338.

Project ICE Bibliography in your school library for available Resource

. Please offer suggestions, comments, or advice--at any time--so that this . Let's help each other.

With the guide by reacting to it with scratch ideas, notes, and extended use of the episode pages or use the attached evaluation format, which will be collected next year and will be used in our revisions. We sincerely want your suggestions--negative and positive. Please note that some resources listed may refer to specific, local community resources or conditions. In such cases, school districts and teachers will have to adopt local or available substitutes. A list of terms pertinent to the episodes is below.

Other experts have simplified the issue--survival--yours, mine, our students, and complexity--often noted as the work of a genius--will take our genius to save. A year's work by a hundred of your fellow teachers is a saving to you, their work will crumble, and so might we all--literally. Instead, think, feel, and act in harmony with our world.

Editorial Board

is a measurable mental skill, ability, or process based on factual data. refers to student attitudes, values, and feelings.

Acceptable Performance Will Include (labels a cognitive or mental performance.)
Mental Problem Area.

ACKNOWLEDGEMENTS: The following teachers and consultants part
of the Supplementary Environmental Education

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ling, Marinette
bridge, White Lake
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C Energy from the sun, the basic source
 O
 N of all energy, is converted through
 C
 E photosynthesis into a form all
 P
 T living things can use for life pro-
 cesses. (1)

Discipline Area

Subject

Problem Orientation

BEHAVIORAL OBJECTIVES

SUGGESTED L

Cognitive: Through the use of antonyms and the shades of meaning between, the student will reinforce the concept of life's dependence on the sun. Also contribute to the development of vocabulary & knowledge of parts of speech.
Affective: The student will support the idea that words are related through shades of meaning from one extreme to the opposite extreme (antonym) such as life to death.

I. Student-Centered in class activity

Diamante-a kind of poem in the shape of a diamond.

noun

adj. adj.

participle part. part.

noun noun noun noun

participle part. part.

adj. adj.

noun

(Center four nouns related to both antonyms)

Example

life

green bright

shining growing blooming

heat motion sun food

fading slowing dimming

brown old

death

Skills to be Learned

Word selection

Organization

Contrast

Students working together

un, the basic source

converted through

Discipline Area Language Arts

to a form all

Subject

Written Expression-Grammar

use for life pro-
cesses. (1)

Problem Orientation Energy use Grade 8

OBJECTIVES

SUGGESTED LEARNING EXPERIENCES

the use
shades
the
force the
open-
also
develop-
& know-
speech.
dent
ea
ted
eaning
the
ntonym)
th.

I. Student-Centered in class
activity
Diamante-a kind of poem in
the shape of a diamond.
noun
adj. adj.
participle part. part.
noun noun noun noun
participle part. part.
adj. adj.
noun
(Center four nouns related
to both antonyms)
Example
life
green bright
shining growing blooming
heat motion sun food
fading slowing dimming
brown old
death

II. Outside Resource and
Community Activities

Resource and Reference Materials

Continued and Additional Suggest

Publications:

Books:

Thesaurus

Dictionary

Text books

Audio-Visual:

Community:

Materials	Continued and Additional Suggested Learning Experiences

C 2. All living organisms interact among
 O
 N themselves and their environment,
 C
 E forming an intricate unit called
 P
 T an ecosystem.

Discipline Area _____

Subject _____

Problem Orientation _____

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING ACTIVITIES

Cognitive: Students will reinforce their concepts of environment by searching for words related to environment. They will expand word recognition and vocabulary at the same time by making a puzzle to be solved by another student.
Affective: The student will submit words concerned with ecology which will broaden the concept of ecology and increase concern for the ecosystem.

- I. Student-Centered in class activity
1. Prepare a word list concerned with ecology or some sub-division of it. Scramble the letters of these words to make a puzzle, as illustrated below. Each student contributes one or more puzzles to be solved by other students.

WORD LIST

Trees - lake - soil - rain
wildlife - grass - air - sun

Skills to be Learned

Use of dictionary
 Reference
 Reading
 Spelling
 Roget's Thesaurus

w i r a i r t e n l r o f
 t i s e l e r f g r a s s
 i l l d e s e r n o u i u
 e o u d a b t r e e s o r
 x r i m l n y z o f b s c
 l k o u s i p r e i n g l
 d l e f g h f i n g i m
 j i l o l a k e x p o r s
 o g r a i n s w r s u n m

living organisms interact among

s and their environment,

Discipline Area

Language Arts

n intricate unit called

Subject

Language Arts

tem.

Problem Orientation

Ecosystem

Grade

8

ORAL OBJECTIVES

Students will
their concepts
ent by searching
related to environ-
will expand word
and vocabu-
same time by
puzzle to be
another student.
The student
words con-
ecology which
n the concept
and increase
the eco-

e Learned
tionary

esaurus

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

1. Prepare a word list con-
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WORD LIST

Trees - lake - soil - rain
wildlife - grass - air - sun

w i r a i r t e n l r o f
t i s e l e r f g r a s s
i l l d e s e r n o u i u
e o u d a b t r e e s o n
x r i m l n y z o f b s c
l k o u s i p r e i n g l
d b e f g h f i n g i i m
j i l o l a k e x p o r s
o g r a i n s w r s u n m

II. Outside Resource and
Community Activities

Resource and Reference Materials	Continued and Additional Suggested Learning
<p><u>Publications:</u></p> <ul style="list-style-type: none"> Newspaper articles Pamphlets & bulletins on ecology Stories Books Magazines <ul style="list-style-type: none"> <u>National Wildlife</u> <u>Outdoor Life</u> <u>Field & Stream</u> <p><u>Audio-Visual:</u></p> <ul style="list-style-type: none"> Filmstrips (any on environment) <p><u>Commu</u></p>	

Materials	Continued and Additional Suggested Learning Experiences
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logy

at)

C 3. Environmental factors are limiting
 O
 N on the numbers of organisms living
 C
 E within their influence, thus, each
 P
 T environment has a carrying capacity.

Discipline Area Language
 Subject Reading
 Problem Orientation Ca

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING
<p><u>Cognitive:</u> After reading the novel, the student will list in logical order the steps necessary to establish a wildlife sanctuary.</p> <p><u>Affective:</u> The student will specify that the carrying capacity of an area is determined by certain ecological factors. The book or movie illustrates these factors.</p>	<p>I. Student-Centered in class activity</p> <p>A. Class oriented activity</p> <ol style="list-style-type: none"> 1. Read Paul Annixter's <u>Swiftwater</u>. 2. List the steps in their proper order, the Calloways used to realize the dream of a lifetime of establishing a sanctuary for wild geese which pass over the Maine Woods twice each year.
<p><u>Skills to be Learned</u></p> <p>Arrange facts in a special order</p> <p>Research the life cycle of the Canadian goose</p> <p>Compare and contrast through various media</p>	<p>Compare the book, <u>Swiftwater</u>, with the Disney movie from the book, <u>Those Calloways</u>.</p>

Environmental factors are limiting

Numbers of organisms living

their influence, thus, each

ent has a carrying capacity.

Discipline Area Language Arts

Subject

Reading

Problem Orientation Carrying Capacity Grade 8

LEARNING OBJECTIVES

After reading
the student will
logical order the
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sanctuary.

The student will
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nd contrast
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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

A. Class oriented activity

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Swiftwater.
2. List the steps in their
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of a lifetime of establishing
a sanctuary for wild geese
which pass over the Maine
Woods twice each year.
3. Compare the book,
Swiftwater, with the
Disney movie from the
book, Those Calloways.

II. Outside Resource and
Community Activities

A. Out of class

1. Research the flyway
sanctuaries of Wis.
Then develop a plan
in well-formed para-
graphs that will
further the species
of the Canadian
goose.

Resource and Reference Materials

Continued and Additional S

Publications:

Books:

Swiftwater, Paul Annixter

National Wildlife, Ranger Rick's

Audio-Visual:

Community:

ence Materials

Continued and Additional Suggested Learning Experiences

mixter
Ranger Rick's

[Faint, illegible text in the right column, likely bleed-through from the reverse side of the page.]

ESEA Title III - 59-70-0135-1 Project I-C-E

C
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N
C
E
P
T

4. An adequate supply of pure water
is essential for life.

Discipline Area

Subject

Problem Orientation E.F.

BEHAVIORAL OBJECTIVES

Cognitive: Through an outline the student will evaluate the effects of various forms of water pollution on man's environment in different periods of history.
Affective: The student will challenge or defend the statement that the pollution of man's environment increased in proportion to the development of civilization

Skills Learned
Picking out descriptive phrases
Observe and organize
Outlining

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
 1. Read Henry Wadsworth Longfellow's Evangeline, Parts II and III.
 2. Develop a list of phrases that depict the author's description of the undisturbed waterway of the Mississippi River of the 18th century.
 3. In outline form, evaluate at least four villains of our water supply and their possible solutions.

II.

adequate supply of pure water
essential for life.

Discipline Area

Language Arts

Subject

Evaluation

Problem Orientation E.P.A. Water Grade 8

GENERAL OBJECTIVES

Through an out-
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of history.
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defend the
at the pollution
ronment in-
portion to the
civilization

Learned
descriptive

organize

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
1. Read Henry Wadsworth Longfellow's Evangeline, Parts II and III.
 2. Develop a list of phrases that depict the author's description of the undisturbed waterway of the Mississippi River of the 18th century.
 3. In outline form, evaluate at least four villains of our water supply and their possible solutions.

- II. Outside Resource and Community Activities
1. Observe a stream or river of the community for effects of water pollution and organize findings.
 2. Collect samples from local stream-bring to class-write descriptions of each sample after close observation.... touching, smelling, etc.

Resource and Reference Materials	Continued and Additional Sug
<p><u>Publications:</u></p> <p>"Evangeline" by Henry Wadsworth Longfellow</p> <p>Excerpts from Walden Bond</p> <p>Excerpts from "The Sea Around Us"</p> <p>R. Carson - (parts on water's origin)</p> <p><u>Audio-Visual:</u></p> <p><u>Community:</u></p>	

Materials	Continued and Additional Suggested Learning Experiences
<p>Wadsworth</p> <p>ond</p> <p>Around Us"</p> <p>water's</p>	

C An adequate supply of clean air is
O
N essential because most organisms de-
C
E pend on respiration to supply the
P oxygen needed to release the energy
T in their food. (#5)

Discipline Area

Subject

Problem Orient

BEHAVIORAL OBJECTIVES

Cognitive: After reading the novel, the student will identify forms of air pollution in the 19th and 20th centuries through an informative article written to summarize these forms.

Affective: Using the novel, A Christmas Carol, the student will attempt to contrast air pollution of that time with the present.

SUGGESTED

I. Student-Centered class activity

1. Read Dickens' A Christmas Carol "Marley's Ghost"
2. Identify the various sources of air pollution of London to the 20th century air pollution of our area.

Skills to be Learned

Ability to identify facts.

Compare and contrast data.

Write an article.

the supply of clean air is
 because most organisms de-
 spiration to supply the
 ed to release the energy
 food. (#5)

Discipline Area Language Arts
 Subject Written Expression
 Problem Orientation E.P.A. Air Grade 8

GENERAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
<p>After reading the student will identify air pollution in the 19th and 20th centuries</p> <p>Informative article summarize these</p> <p>Using the novel, <u>Carol</u>, the student attempt to contrast the air pollution of that time with the present.</p>	<p>I. Student-Centered in class activity</p> <ol style="list-style-type: none"> 1. Read Dickens' <u>A Christmas Carol</u> "Marley's Ghost" 2. Identify the various sources of air pollution of London to the 20th century air pollution of our area. 	<p>II. Outside Resource and Community Activities</p> <ol style="list-style-type: none"> 1. Observe the presence of air pollution by the senses of sight and smell in our locality. 2. Collect photographs of local and national pollution.
<p>What Have We Learned</p> <p>Identify facts.</p> <p>Contrast data.</p> <p>Article.</p>		

Resource and Reference Materials	Continued and Additional
<u>Publications:</u>	

Charles Dickens'
"A Christmas Carol"

Audio-Visual:

Community:

nce Materials	Continued and Additional Suggested Learning Experiences

C 6. Natural resources are not equally

O

N distributed over the earth or over

C

E ti and greatly affect the geographic

P

T conditions and quality of life.

Discipline Area

Lar

Subject

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Problem Orientation

Res

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING

Cognitive: By the use of posters, speeches, letters, and planning in a class meeting, the students will develop a project for the collecting of cans & bottles for recycling.
Affective: The students will evaluate the amount of materials used by a household & community. Each time they prepare a can or bottle for recycling they will be promoting concern for conservation of material resources.

I. Student-Centered in class activity

II.

Skills to be Learned

Organization & planning of a cooperative effort.
Conducting a meeting & involving every member of a group

resources are not equally

over the earth or over

eatly affect the geographic

and quality of life.

Discipline Language Arts

Subject

Oral Expression

Natural

Problem Orientation

Resources

Grade

8

AL OBJECTIVES

by the use of
ches, letters,
in a class
students will
ject for the
cans & bot-
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ne students
the amount
used by a
community.
y prepare a
for recycling
promoting con-
ervation of
urces.

Learned
& planning of
effort.
meeting &
ry member of

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

II. Outside Resource and
Community Activities

1. Make arrangements for
disposing of bottles & cans
collected, i.e. establish
a business relation with
a collecting point.
2. Learn how to sort materials
according to salvage speci-
fications.
3. Learn to identify materials.
4. Pursue the steps through
which salvage materials
pass in producing a new
product.
5. Be alert to any other
waste materials & possi-
bilities for recycling.

Resource and Reference Materials	Continued and Additional Suggest
<p><u>Publications:</u></p> <p> <u>30 Basic Speech Experiences</u>, Clark Publishing Co. elementary edition of <u>Robert's Rules</u> <u>of Order</u>. newspapers magazines </p> <p><u>Audio-Visual:</u></p> <p> <u>Community:</u> resource people who are connected with any phase of recycling of salvage materials </p>	

Materials	Continued and Additional Suggested Learning Experiences
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ces, Clark

bert's Rules

C 7. Factors such as facilitating transportation,
O
N economic conditions, population growth, Discipline Area
C
E and increased leisure time have a great Subject
P
T influence on changes in land use and Problem Orientat
centers of population density.

BEHAVIORAL OBJECTIVES

SUGGESTED LE

Cognitive: By writing an editorial, each student will express his opinion on how increased leisure time & the use of snowmobiles have influenced change in land use in his locality.
Affective: The student will defend his own feelings on the issue that land use is being changed by the use of snowmobiles.

- I. Student-Centered in class activity
 - A. Classroom
 1. Examples of editorials will be presented to the students.
 2. Class will discuss the editorial style writing compares with other expository writing.
 3. Each student will express his own opinion concerning the change in land use by snowmobiles.
 4. Editorials will be published as a class newspaper.

Skills to be Learned

Identifying the editorial style of writing
 Writing in the editorial style

such as facilitating transportation,

ditions, population growth, Discipline Area Language Arts

ed leisure time have a great Subject

Writing (editorials)

n changes in land use and
population density.

Problem Orientation Land Use

Grade 8

AL OBJECTIVES

SUGGESTED LEARNING EXPERIENCES

y writing an
ch student will
pinion on how
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ange in land
eality.
ne student will
feelings on
t land use is
by the use of

Learned
the editorial
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ne editorial

I. Student-Centered in class activity

A. Classroom

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2. Class will discuss how the editorial style of writing compares with other expository writing.
3. Each student will express his own opinion concerning the change in land use by snowmobiles.
4. Editorials will be published as a class newspaper.

II. Outside Resource and Community Activities

Materials	Continued and Additional Suggested Learning Experiences

C 8. Cultural, economic, social, and
 O
 N political factors determine status
 C
 E of man's values and attitudes
 P
 T toward his environment.

Discipline Area _____ La
 Subject _____ La
 Problem Orientation _____ At

ESEA Title III - 59-70-0135-1 Project I-C-E

BEHAVIORAL OBJECTIVES

Cognitive: Students will picture an example of pollution in his own personal environment by a collage. By another collage, he will propose a possible solution to this pollution problem.
Affective: Students will share with other individuals the idea that most pollution problems can be resolved.

Skills to be Learned

Observation
 Brainstorming
 Collage
 Interview
 Gathering Illustrations

SUGGESTED LEARNING

I. Student-Centered in class activity
 1. Collect illustrations to portray problems & solutions by use of a collage.

nomic, social, and
 s determine status
 and attitudes
 onment.

Discipline Area Language Arts
 Subject Language Arts
 Problem Orientation Attitudes Grade 8

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
ts will of pol- personal collage. , he will solution problem. ts will ndivi- t most can be	I. Student-Centered in class activity 1. Collect illustrations to portray problems & solutions by use of a collage.	II. Outside Resource and Community Activities 1. Observe the local environment and list the examples of pollution observed. 2. Determine as many solutions as possible by discussing with parents and others or by brainstorming in class. 3. Interview local citizens who are associated with a pollution problem. (Tape record or take notes) It would be desirable to get as many points of view as possible. The object of interviews would be to become aware of problems and possible solutions.
ed ations		

als

Continued and Additional Suggested Learning Experiences

ls
nt

C 9. Man has the ability to manage,
O
N manipulate, and change his
C
E environment.
P
T

Discipline Area Language
Subject Language
Problem Orientation Land

ESEA Title III - 59-70-0135-1 Project I-C-E

BEHAVIORAL OBJECTIVES

Cognitive: Through observation, organization & communication, the students will provide a series of graphic illustrations to portray a change in the environment.
Affective: The student will survey the changes in the environment produced by man's activities & the created effects which might be beneficial or destructive or both.

Skills to be Learned

Observing
Communicating by vision & words
Organizing sequence
Photography
Drama

SUGGESTED LEARNING EXPERIENCES

- | | |
|---|---------|
| I. Student-Centered in class activity | II. Out |
| A. Classroom activity | Comm |
| 1. The class may want to make a list of sites to observe such as: | A. I |
| a. Installation of sewerage disposal system. | 1 |
| b. Any building construction site. | 2 |
| c. Development of a wildlife sanctuary. | 3 |
| d. Building or altering of a road or highway. | 4 |
| e. Conservation practices in connection with a lake or stream | 5 |
| f. Beautification of any lake, stream, any grounds, lawn, park, wayside, etc. | 6 |
| g. Fish hatchery or wild game farm. | |

ty to manage,

ge his

Discipline Area Language Arts

Subject

Language Arts

Problem Orientation Land Use

Grade 8

IVES

SUGGESTED LEARNING EXPERIENCES

ser-

I. Student-Centered in class activity

A. Classroom activity

1. The class may want to make a list of sites to observe such as:
 - a. Installation of sewerage disposal system.
 - b. Any building construction site.
 - c. Development of a wildlife sanctuary.
 - d. Building or altering of a road or highway.
 - e. Conservation practices in connection with a lake or stream
 - f. Beautification of any lake, stream, any grounds, lawn, park, wayside, etc.
 - g. Fish hatchery or wild game farm.

II. Outside Resource and Community Activities

1. Local project

1. Select a construction project to take place in the local vicinity.
2. Observe the site prior to any change & photograph (slides) areas to be changed. Use students to pose & direct attention to selected features.
3. Do the same during development operations.
4. Continue recording, by photographic slides, after changes are complete.
5. Plan & execute narration by tape recordings with student voices or printed captions.
6. Emphasis is to be placed on ecological effects, pro & con.

Resource and Reference Materials
Publications:

Continued and Additional Suggest

Audio-Visual:

Community:

Materials	Continued and Additional Suggested Learning Experiences
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C 10. Short-term economic gains may
 O
 N produce long-term environmental
 C
 E losses.
 P
 T

Discipline Area Language

Subject Debate

Problem Orientation Recy

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES
<p>Cognitive: Through a debate-form discussion, the student will develop an awareness that there is more than one point of view to any issue.</p> <p>Affective: The student's will actively participate in a recycling project in their community.</p>	<p>I. Student-Centered in class activity</p> <ol style="list-style-type: none"> 1. With the help of current publications, define the term of "recycling," for example, cans and bottles. 2. Divide the class in two groups. One group will expand all possible advantages to recycling and the other group the disadvantages. 3. Upon collecting all materials and facts, a debate-form discussion will follow.
<p><u>Skills to be Learned</u></p> <p>Reference reading Organizing a debate Participating in a debate</p>	

term economic gains may

g-term environmental

Discipline Area Language Arts

Subject Debate

Problem Orientation Recycling Grade 8

AL OBJECTIVES

through a
discussion,
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than
view to

the student's
participate
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Learned
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a debate
g in

SUGGESTED LEARNING EXPERIENCES

- I Student-Centered in class activity
1. With the help of current publications, define the term of "recycling," for example, cans and bottles.
 2. Divide the class in two groups. One group will expand all possible advantages to recycling and the other group the disadvantages.
 3. Upon collecting all materials and facts, a debate-form discussion will follow.

II. Outside Resource and Community Activities

Resource and Reference Materials	Continued and Additional Suggeste
<u>Publications:</u> <u>Basic Speech Experiences</u> , Clark Publishing Co. <u>Speaking By Doing</u> , National Textbook Co. Magazines and other current publications	
<u>Audio-Visual:</u> Debate film	
<u>Community:</u> Local newspapers	

Materials	Continued and Additional Suggested Learning Experiences
<p>s, Clark</p> <p>onal</p> <p>rent</p>	<p>[Faint, illegible text continues in this column]</p>

C 11. Individual acts, duplicated
 O
 N or compounded, produce significant
 C
 E environmental alterations over time.
 P
 T

Discipline Area Language A

Subject Oral Expression

Problem Orientation Pollution

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
<p><u>Cognitive:</u> By research and interview, the students will through critical thinking realize that there is more than one point of view on an issue.</p> <p><u>Affective:</u> The student will accept or challenge another point or view.</p>	<p>I. Student-Centered in class activity</p>	<p>II. Out of class</p> <p>Comm</p> <p>1. C</p> <p>ma</p> <p>su</p> <p>2. M</p> <p>ar</p> <p>3. D</p> <p>in</p> <p>4. S</p> <p>pe</p> <p>on</p> <p>a.</p> <p>b.</p> <p>c.</p> <p>d.</p> <p>e.</p> <p>f.</p>
<p><u>Skills to be Learned</u></p> <p>Speaking-Role playing</p> <p>Listening</p> <p>Critical thinking</p> <p>Ability to organize information</p>		

acts, duplicated
produce significant
iterations over time.

Discipline Area Language Arts

Subject Oral Expression

Problem Orientation Pollution Grade 8

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
arch ugh is c of dent allenge ew. ed ving e	I. Student-Centered in class activity	II. Outside Resource and Community Activities 1. Collect newspaper and magazine articles on a subject. 2. Make notes on newscasters and commentaries. 3. Discuss issues with people in all walks of life. 4. Search out and interview people who are authorities on a subject such as: a. Kinds of detergents b. Use of public waters c. Use of pesticides d. Use of herbicides e. Use of fuels f. Kinds of power plants

ence Materials	Continued and Additional Suggested Learning Experiences

C 12. Private ownership must be
O
N regarded as a stewardship and
C
E should not encroach upon or violate
P
T the individual right of others.

Discipline Area Language
Subject Newspaper
Problem Orientation Own

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING	
<p><u>Cognitive:</u> After finding newspaper or magazine articles which are examples of conflict between private ownership & the rights of others, students will discuss the rights of individuals.</p> <p><u>Affective:</u> Students will accept the human value of considering the rights of private ownership & rights of public domain.</p>	I. Student-Centered in class activity	II
<p><u>Skills to be Learned</u></p> <p>Reading</p> <p>Discussion</p>		

ership must be
stewardship and
ouch upon or violate
right of others.

Discipline Area Language Arts
Subject Newspaper Reading
Private
Problem Orientation Ownership Grade 8

OBJECTIVES
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will
ts of
ents will
value of
rights of
& rights

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

II. Outside Resource and
Community Activities

A. Library

1. After completing a news paper unit, the students could search for article in various papers & magazines that would relate to the concept.
2. Each student will read the article he found.
3. The class will discuss whose rights and who's right.

urned

Materials

Continued and Additional Suggested Learning Experiences

Aldo Leopold.
ference for
er

PROJECT I-C-E

Episode Evaluation Form
(Reproduce or duplicate as needed)

In commenting on each episode used in your class, you may wish to use the following format. Please feel free to adapt it and add more pages. Let us hear your comments - negative and positive.

I. Behavioral Objectives

A. Cognitive:

B. Affective:

II. Skills Developed

III. Suggested Learning Experiences

A. In-Class:

B. Outside & Community Activities

IV. Suggested Resource & Reference Materials
(specific suggestions & comments)

PROJECT I-C-E

Episode Evaluation Form (Reproduce or duplicate as needed)

on each episode used in your class, you may wish to duplicate this suggested
feel free to adapt it and add more pages. Let us know all your critiques and
tive and positive.

Objectives
ve:

ve:

eloped

Learning Experiences
:

& Community Activities

Resource & Reference Materials
uggestions & comments)

Project I - C - E

INSTRUCTION - CURRICULUM - ENVIRONMENT

ED055919

A SUPPLEMENTARY PROGRAM FOR ENVIRONMENTAL EDUCATION

DISCIPLINE AREA Language Arts GRADE 9

Produced under Title III E.S.E.A.
PROJECT I-C-E
Serving Schools in CESA's 3-8-9
1927 Main Street
Green Bay, Wisconsin 54301
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Robert Wa
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George He

INSTRUCTION - CURRICULUM - ENVIRONMENT

PROGRAM FOR ENVIRONMENTAL EDUCATION

Language Arts GRADE 9

Title III E.S.E.A.

in CESA's 3-8-9

onsin 54301

Robert Warpinski, Director
Robert Kellner, Asst. Director
George Howlett, EE Specialist

PREFACE

If you wish to excite students about their environment, help is of over a hundred teachers, year long meetings, a summer workshop ecologists, this guide means realistic, developed aid for you. Pl which have directed teachers in writing and editing this guide.

1. This guide is supplementary in nature and the episodes are des ces--to plug into existing, logical course content.
2. Each page or episode offers suggestions. Since you know your to adapt, adopt, or use. Be design, the range of suggestions i mentation and usage are even wider. Many episodes are self-con others can be changed in part or developed more keenly over a possibilities allow you to explore.
3. Now we urge that you try the episodes and suggested learning e plan. The reasons are simple. No guide has all the answers a unless viewed in the context of your classroom situation. Thu give it a triple reading, check over the resources listed, mak prime your students, and seek help. The Project personnel and knowledge page stand ready to aid your efforts. Feel free
4. The Project Resource Materials Center serves all CESA 3, 8, an private. We will send available materials pre-paid. Call for visit. Phone 432-4338.
5. Check often the Project ICE Bibliography in your school library Center materials. Please offer suggestions, comments, or advi service may grow. Let's help each other.
6. Involve yourself with the guide by reacting to it with scratch suggestions on the episode pages or use the attached evaluation lected in late May next year and will be used in our revisions reactions and suggestions--negative and positive. Please note t in the episodes may refer to specific, local community resource cases, individual school districts and teachers will have to ac stitutes. A list of terms pertinent to the episodes is below.
7. Ecologists and other experts have simplified the issue--surviva Creation's beauty and complexity--often noted as the work of a and human energy to save. A year's work by a hundred of your f gesture. Without you, their work will crumble, and so might we let us live to think, feel, and act in harmony with our world.

1. Cognitive means a measurable mental skill, ability, or proce
2. Affective refers to student attitudes, values, and feelings.
3. APWI means Acceptable Performance Will Include (labels a cog
4. EPA - Environmental Problem Area.

PREFACE

excite students about their environment, help is ready. Thanks to the efforts of teachers, year long meetings, a summer workshop, university consultants and guide means realistic, developed aid for you. Please note the following ideas tested teachers in writing and editing this guide.

supplementary in nature and the episodes are designed--at appropriate instances--into existing, logical course content.

episode offers suggestions. Since you know your students best, you decide what to adopt, or use. Be design, the range of suggestions is wide; your chances for experimentation are even wider. Many episodes are self-contained, others open-ended, still changed in part or developed more keenly over a few weeks. These built-in allow you to explore.

that you try the episodes and suggested learning experiences but please pre- reasons are simple. No guide has all the answers and no curriculum will work in the context of your classroom situation. Thus, before trying an episode, do a little reading, check over the resources listed, make mental and actual notes, discuss with students, and seek help. The Project personnel and teachers listed on the acknowledgment page stand ready to aid your efforts. Feel free to ask their help in pre-planning. The Resource Materials Center serves all CESA 3, 8, and 9 area schools--public and private. We will send available materials pre-paid. Call for any help, materials, or to 432-4338.

See Project ICE Bibliography in your school library for available Resource Materials. Please offer suggestions, comments, or advice--at any time--so that this work can grow. Let's help each other.

Work with the guide by reacting to it with scratch ideas, notes, and extended comments on the episode pages or use the attached evaluation format, which will be collected. May next year and will be used in our revisions. We sincerely want your suggestions--negative and positive. Please note that some resources listed may refer to specific, local community resources or conditions. In such cases, individual school districts and teachers will have to adopt local or available substitutes. A list of terms pertinent to the episodes is below.

Other experts have simplified the issue--survival--yours, mine, our students, our duty and complexity--often noted as the work of a genius--will take our genius to save. A year's work by a hundred of your fellow teachers is a saving grace for you, their work will crumble, and so might we all--literally. Instead, let's think, feel, and act in harmony with our world.

Editorial Board

Means--a measurable mental skill, ability, or process based on factual data. Attitude refers to student attitudes, values, and feelings.

Acceptable Performance Will Include (labels a cognitive or mental performance.) Environmental Problem Area.

ACKNOWLEDGEMENTS: The following teachers and consultants part
of the Supplementary Environmental Education

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n, Marinette
dard, Coleman
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sten, Suring
n, Cath. Central
n, Bonduel
lin, Goodman
Shawano
o, Niagara
er, Gillett
Crivitz
ling, Marinette
bridge, White Lake
musl, White Lake
n, Lena
, Gillett
cer, Gillett

CESA #8

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C 1. Energy from the sun, the basic source

O

N of all energy, is converted through

C

E plant photosynthesis into a form all

P

T living things can use for life pro-
cesses.

Discipline Area _____ La

Subject _____ My

Problem Orientation _____ En

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING

Cognitive: The student will be able to compare & contrast modern & ancient concepts of sun and of god and write an essay illustrating the importance of the sun on his life through the study of mythology.
Affective: Using brainstorming, research, interviewing, theme writing, & teamwork, students will understand the importance of the sun in their own lives.

Skills to be Learned

List in importance
Formulate reasons
Research
Construct a chart
Survey & interview
Compare & contrast
Write an essay

- | I. Student-Centered in class activity | II. |
|---|-----|
| 1. Form the students in "brainstorming" groups to list natural phenomenon or resources which they think are important to them. | |
| 2. After formulating a list, let each group come up with the three most important resources along with reasons why they are important. | |
| 3. Let each group have a spokesman who presents the list and the reasons for selection. | |
| 4. Present Greek & Roman gods and what they stand for. Stress the importance of Phoebes Apollo, the sun god, and the ancient idea of a god, why did they construct the various mythological gods. | |
| 5. Construct a chart showing th various things that were dependent on the sun during ancient times. | |
| 6. Compare & contrast the ancient and modern concepts of the sun & of god. Determine | |

(Cont.)

the sun, the basic source

converted through

Discipline Area

Language Arts

sis into a form all

Subject

Mythology

use for life pro-

Problem Orientation

Energy Use

Grade

9

cesses.

OBJECTIVES

SUGGESTED LEARNING EXPERIENCES

<p>dent pare ancient of god illus- nce of through ogy. rain- inter- ing, & will rtance own</p>	<p>I. Student-Centered in class activity</p> <ol style="list-style-type: none">1. Form the students in "brainstorming" groups to list natural phenomenon or resources which they think are important to them.2. After formulating a list, let each group come up with the three most important resources along with reasons why they are important.3. Let each group have a spokesman who presents the list and the reasons for selection.4. Present Greek & Roman gods and what they stand for. Stress the importance of Phoebes Apollo, the sun god, and the ancient idea of a god, why did they construct the various mythological gods.5. Construct a chart showing the various things that were dependent on the sun during ancient times.6. Compare & contrast the ancient and modern concepts of the sun & of god. Determine	<p>II. Outside Resource and Community Activities</p> <ol style="list-style-type: none">1. Do research in library why the Greeks & Romans worshipped the sun & made it into a god. Read stories of Apollo & other gods.2. Have the class survey various people to procure their concepts of the sun & of god. Present findings in class.3. Have students tape interviews with members of the community relative to the importance of the sun & weather to their business.
--	--	--

d

(Cont.)

Resource and Reference Materials	Continued and Additional Suggested Le
<p><u>Publications:</u></p> <p> <u>Gods, Heroes, and Men of Ancient Greece</u>, W. H. D. Rouse, Signet. <u>Ancient Myths</u>, Norma L. Goodrich. Mentor paperback. <u>Outlooks Through Literature</u>, Pooly, Scott, Foresman. <u>Understanding Literature</u>, Wofford, Ginn & Co. </p> <p> <u>Audio-Visual:</u> filmstrips slides tape recorder </p> <p><u>Community:</u></p>	<p> I. (Cont.) which concept is more valid. 7. Teacher inform students that the it makes us appreciate the sun and 8. Students will evaluate their inte how things are dependent on the su 9. In a theme, the students will dis to them if sunlight no longer illu 10. The students will read stories o teacher will show filmstrips with them extemporaneously through thei </p>

ials	Continued and Additional Suggested Learning Experiences
ent net. rich. Pooly, fford,	<p>I. (Cont.) which concept is more valid.</p> <p>7. Teacher inform students that the value of myths is that it makes us appreciate the sun and other resources.</p> <p>8. Students will evaluate their interviews for logic & how things are dependent on the sun.</p> <p>9. In a theme, the students will discuss what would happen to them if sunlight no longer illuminated the earth.</p> <p>10. The students will read stories of gods. Then the teacher will show filmstrips with students narrating them extemporaneously through their knowledge.</p>

C
O 2. All living organisms interact
N
C among themselves and their environment,
E
P forming an intricate unit called an
T ecosystem.

Discipline Area

Subject

Problem Orient

ESEA Title VII - 59-70-0135-1 Project I-C-E

BEHAVIORAL OBJECTIVES

Cognitive: After studying the school as a miniature ecosystem, each student will present a formal speech illustrating the relationship within another ecosystem.

Affective: Using research and teamwork, students will understand the complexities of an ecological problem as demonstrated by the formulation of an ecosystem.

Skills to be Learned

Research
Organize
Cooperate
Develop cause and effect relationships

SUGGESTED LEARNING

- I. Student-Centered in class activity
 1. Bring in resource person (could be science teacher) to explain the concept in a formal speech. Discuss the organization of the presented speech and the meaning of the concept.
 2. Show how the school is a miniature ecosystem. Have students interview various teachers, administrators, coaches, cooks, janitors, office help and other students. In interviews students will try to determine on whom and on what each person is dependent, who or what is dependent on this person, and with whom or what each person interacts and associates. Students will pool their findings in class and with the teacher's assistance, formulate the ecosystem of their school.

(cont.)

living organisms interact
 themselves and their environment,
 an intricate unit called an

Discipline Area Language Arts
 Subject English
 Problem Orientation Ecosystem Grade 9

GENERAL OBJECTIVES

After studying
 a miniature
 each student
 a formal
 illustrating the
 within another
 using research
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 and the com-
 an ecological
 demonstrated by
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Learned

se and effect

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
 1. Bring in resource person (could be science teacher), to explain the concept in a formal speech. Discuss the organization of the presented speech and the meaning of the concept.
 2. Show how the school is a miniature ecosystem. Have students interview various teachers, administrators, coaches, cooks, janitors, office help and other students. In interviews students will try to determine on whom and on what each person is dependent, who or what is dependent on this person, and with whom or what each person interacts and associates. Students will pool their findings in class and with the teacher's assistance, formulate the ecosystem of their school.

II. Outside Resource and Community Activities

(cont.)

Resource and Reference Materials

Publications:

"Speaking by Doing"
National Textbook Co.
Skokie, Ill.
Magazine:
"Vital Speeches"

Audio-Visual:

Filmstrip: "Man-Managed Ecosystems"
McGraw - Hill
Bulletin board display

Community:

Science teacher or university
teacher knowledgeable of
ecosystems.

Continued and Additional Suggested

I. (cont.)

3. Each student will pick one m
living, plant or animal) with
In the speech, each student wi
factors to the selected member
4. Research period in the libra
factors which are to be associ
the ecosystem. Class period t
and to organize scheme of ecol
of appearance. Teacher will a
and appoint one member of each
of the ecosystem.
5. One person from each group w
each day.
6. Class will make comments on
7. Have class try to relate ec
end 7.
8. Have a member from each of t
growing ecosystems daily so th
growing interaction of the eco
9. As a final activity, someone
plate beyond the scope of the
Options are:
student
teacher and student
team teachers
resource person

I. (cont.)

3. Each student will pick one member of the ecosystem (non-living, plant or animal) with which to develop a speech. In the speech, each student will relate two additional factors to the selected member of the ecosystem.
4. Research period in the library to discover the two reliable factors which are to be associated with the chosen member of the ecosystem. Class period to share research findings and to organize scheme of ecological topics in the order of appearance. Teacher will assign the order of appearance and appoint one member of each group to chart the growing of the ecosystem.
5. One person from each group will present his formal speech each day.
6. Class will make comments on students' presentations.
7. Have class try to relate ecosystems to each other at end of #7.
8. Have a member from each of the three groups chart the growing ecosystems daily so that students visually see the growing interaction of the ecosystems.
9. As a final activity, someone will summarize and/or extrapolate beyond the scope of the three ecosystems presented.
- Options are:
- student
 - teacher and student
 - team teachers
 - resource person

systems"

y

ESEA Title III - 59-70-0135-1 Project I-C-E

C 3. Environmental factors are limiting
 O
 N on the numbers of organisms living
 C
 E within their influence, thus, each
 P
 T environment has a carrying capacity.

Discipline Area L
 Subject E
 Problem Orientation

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING ACTIVITIES
<p><u>Cognitive:</u> The student will be able to pick out examples of overloading the carrying capacity of some area & to express this misuse of the environment through the presentation of a TV commercial.</p> <p><u>Affective:</u> The student will display his understanding that an area can support only a limited number of organisms, through a satirical commercial highlighting the problem.</p>	<p>I. Student-Centered in class activity</p> <p>A. Class</p> <ol style="list-style-type: none"> 1. Play record of <u>America the Beautiful</u>, along with pictures or slides of how man has exceeded or disrupted the carrying capacity of his environment 2. Cram the student's desk in as small an area as possible. Analyze what overloading of the carrying capacity can do. Compare the class setup to city form setup or what an overpopulated area does to its environment. 3. Analyze some current TV commercials as to style, information, wording, props, etc. so students can write a commercial which is environmentally oriented 4. Write a TV commercial, Cutting auto production, clean water; returnable bottles; & population control 5. Present commercials or class with appropriate
<p><u>Skills to be Learned</u></p> <p>Critical observation of community</p> <p>Analyze & evaluate</p> <p>Write persuasively</p> <p>Speak clearly & persuasively with the aid of props</p>	

limiting

living Discipline Area Language Arts
each Subject English
Capacity. Problem Orientation Carrying Capacity Grade 9

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

A. Class

1. Play record of America, the Beautiful, along with pictures or slides of how man has exceeded or disrupted the carrying capacity of his environment.
2. Cram the student's desks in as small an area as possible. Analyze what overloading of the carrying capacity can do. Compare the class setup to city-form setup or what an overpopulated area does to its environment.
3. Analyze some current TV commercials as to style, information, wording, props, etc. so students can write a commercial which is environmentally oriented.
4. Write a TV commercial, i.e. Cutting auto production; clean water; returnable bottles; & population control.
5. Present commercials orally in class with appropriate props.

II. Outside Resource and Community Activities

A. Outside work

1. Have students observe in their community & come up with overloading of carrying capacity. (traffic jams, overcrowded slums, water pollution, etc.)

rials

Continued and Additional Suggested Learning Experiences

rials

for

ures
etc.

C 4. An adequate supply of pure

O
N water is essential for life.

Discipline Area Language

C
E
P Subject

Speech

T Problem Orientation Problem

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING

Cognitive: The student will be able to associate pure water with life as shown by his prepared reading.

Affective: Using prepared reading, student will understand the necessity of an adequate supply of pure water as shown by his research and discussion of written materials dealing with the subject.

I. Student-Centered in class activity

A. Class activity

1. Students & teachers will discuss what makes an effective reading, such as the need for preparation, for fluency, for modulating the voice, projecting, & making a good appearance (stand erect, hands out of pockets, etc.).
2. Students will select a newspaper article, poem, story, or original writing and emphasize man's or animal's need for pure water.
3. Students will present their readings to the class.
4. The reader will lead the class in analyzing & evaluating critically, the content of the story.
5. Class will pick the 3 best readings which could be presented in other English classes.

Skills to be Learned

Clear voice control
Eye contact
Oral interpretation

ESEA Title III - 59-70-0135-1 Project I-C-E

supply of pure

al for life.

Discipline Area Language Arts

Subject

Speech - Readings

Problem Orientation Pure Water

Grade 9

OBJECTIVES

Student will
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necessity of
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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

A. Class activity

1. Students & teachers
will discuss what makes
an effective reading,
such as the need for
preparation, for fluency,
for modulating the voice,
projecting, & making a
good appearance (stand
erect, hands out of
pockets, etc.).
2. Students will select a
newspaper article, poem,
story, or original
writing and emphasize
man's or animal's need
for pure water.
3. Students will present
their readings to the
class.
4. The reader will lead the
class in analyzing &
evaluating critically,
the content of the story.
5. Class will pick the 3
best readings which could
be presented in other
English classes.

II. Outside Resource and
Community Activities

Resource and Reference Materials
Publications:

The Sun Around Us, R. Coran

Continued and Additional Sug

Audio-Visual:

Film:

Still Waters, as described in:
An Annotated Checklist of 200
Short Films for Writing Classes,
Ill. Assoc. of Teachers of English
Urbana, Ill.

Filmstrip:

Crisis of the Environment, The
New York Times, 1970, KT6 (5
filmstrips & records)

Community:

Materials	Continued and Additional Suggested Learning Experiences
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in:
200
lasses,
English

The
(5

C 5. An adequate supply of clean air is
 O
 N essential because most organisms
 C
 E depend on oxygen through respiration,
 P
 T to release the energy in their food.

Discipline Area _____ Language _____
 Subject _____ Impro _____
 Problem Orientation _____ Clean _____

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES
<p><u>Cognitive:</u> The student will be able to discuss the need for clean air as demonstrated by giving a speech before the class.</p> <p><u>Affective:</u> Using the approach of the continued story, students will be able to relate what happens when there is no longer a supply of clean air.</p>	<p>I. Student-Centered in class activity</p> <p>1. Teacher should compile a list of words dealing with air pollution, lack of oxygen, and death(e.g.- diseased, morbid, tainted, poisoned, withered, rotten, shrivel, palsied)</p> <p>2. Teacher will start telling a story of man's annihilation due to lack of clean air, which students will continue, using the selected words. Students will be required to talk at least one minute.</p> <p>3. Class discussion should follow focusing on man's need for clean air.</p> <p>4. With aid of students, teacher will make an overhead transparency concentrating on this problem.</p> <p>5. Possible activity: creative writing.</p> <p>a. Existence in a world without automobiles</p> <p>b. Science fiction-life on an airless planet.</p>
<p><u>Skills to be Learned</u></p> <p>Poise and continuity of thought using ecological material</p> <p>Reasoning out the food chain</p>	

ate supply of clean air is

because most organisms

Discipline Area

Language Arts

oxygen through respiration,

Subject

Impromptu Speaking

the energy in their food.

Problem Orientation

Clean Air

Grade

9

AL OBJECTIVES

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. Teacher should compile a list of words dealing with air pollution, lack of oxygen, and death(e.g.- diseased, morbid, tainted, poisoned, withered, rotten, shrivel, palsied)
2. Teacher will start telling a story of man's annihilation due to lack of clean air, which students will continue, using the selected words. Students will be required to talk at least one minute.
3. Class discussion should follow focusing on man's need for clean air.
4. With aid of students, teacher will make an overhead transparency concentrating on this problem.
5. Possible activity: creative writing.
 - a. Existence in a world without automobiles
 - b. Science fiction-life on an airless planet.

II. Outside Resource and Community Activities

e Materials

Continued and Additional Suggested Learning Experiences

periences,

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C 6. Natural resources are not equally

O
N distributed over the earth or over

C
E time and greatly affect the geographic

P
T conditions and quality of life.

Discipline Area _____ Lang _____

Subject _____ Comp _____

Problem Orientation _____ Nat _____ Res _____

BEHAVIORAL OBJECTIVES

Cognitive: The student will be able to demonstrate in writing the ability to distinguish man's points from supporting statements in paragraph writing, e.g. paragraph about concept #6.
Affective: The student, by arranging a group of sentences dealing with natural resources in proper order to make a coherent paragraph, will not only show his understanding of writing skills, but will also show his awareness of natural resources and how they affect geographic conditions through the discussion of the topic.

Skills to be Learned

Be able to distinguish the main parts in a paragraph about concept #6 above from the supporting ideas, e.g. examples, chronology, statistics, transitions, & conclusions.

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. Give students a jumbled paragraph of about 7-8 sentences dealing with #6.

a. Discuss how the paragraph should be by numbering sentences in proper order.

b. Show how the topic sentence is supported by the other sentences & the function they serve.

c. Discuss the meaning of the paragraph.

II.

ESEA Title III - 59-70-0135-1 Project I-C-E

ces are not equally

the earth or over

affect the geographic

ality of life.

Discipline Area

Subject

Problem Orientation

Language Arts

Composition

Natural

Resources

Grade 9

ECTIVES

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. Give students a jumbled paragraph of about 7-8 sentences dealing with #6.
 - a. Discuss how the paragraph should be by numbering sentences in proper order.
 - b. Show how the topic sentence is supported by the other sentences & the function they serve.
 - c. Discuss the meaning of the paragraph.

II. Outside Resource and Community Activities

1. Look up information on #6 from biology, social studies & geography books. Take one of the topics & write a good, solid paragraph.
2. Have a group of the students interview the mayor and/or the city planner to discover why the population is moving in the direction it is moving regarding housing, business, and recreation areas. Prepare a display for the PTA meeting showing projected distribution of population because of natural resources & quality of life. Have students available for the parents to discuss with them this vital issue.

Resource and Reference Materials
Publications:
Handbook for Environmental Action,
 Environmental Science Center,
 5400 Glenwood Avenue, Minneapolis,
 Minn. 55422.
Ten Years to Save Mankind, Depart-
 ment of Natural Resources, State
 of Michigan, Lansing, Mich.
Elements of Style by William
 Strunk.

Audio-Visual:

Community:

Continued and Additional Suggested Le

C 7. Factors such as facilitating transportation,
O
N economic conditions, population growth, Discipline Area Language A
C
E and increased leisure time have a great Subject English
P
T influence on changes in land use and Problem Orientation Leisure
centers of population density.

ESEA Title III - 59-70-0135-1 Project I-C-E

BEHAVIORAL OBJECTIVES

Cognitive: Given excerpts from the Hidden Persuaders & discussion of various product demands, the student will be able to show how people's demands affect the environment as demonstrated by the study & oral presentation of commercials.
Affective: Using commercials as examples, students will be able to explain to the class what happens to the environment when people's demands increase.

Skills to be Learned

Speaking
Cause & effect
Use of tape recorder

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
 - A. Classroom
 1. Read & discuss excerpts from The Hidden Persuaders.
 2. Students and/or teacher can tape a variety of commercials, class discussion of content appeal, & persuasive tactics.
 3. Discuss what would result if everyone did buy one certain product. How would this affect the economy? the population? land use? transportation facilities of that area?

as facilitating transportation,

ons, population growth, Discipline Area Language Arts

isure time have a great Subject

English

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Problem Orientation Leisure Time Grade 9

OBJECTIVES

SUGGESTED LEARNING EXPERIENCES

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- I. Student-Centered in class activity
 - A. Classroom
 1. Read & discuss excerpts from The Hidden Persuaders.
 2. Students and/or teacher can tape a variety of commercials, class discussion of content appeal, & persuasive tactics.
 3. Discuss what would result if everyone did buy one certain product. How would this affect the economy? the population? land use? transportation facilities of that area?

- II. Outside Resource and Community Activities
 - A. Outside classroom
 1. Have students bring in past & present pictures of their community to show how it has changed because of certain products & industry.
 2. Students bring in real or fictitious products with which to present commercials centered around a product that could be produced in their own area.
 3. Discuss the effects that these products would have on the community.

Resource and Reference Materials

Continued and Additional Suggested

Publications:

The Hidden Persuaders, Vance
Packard
Magazine, Advertising Age

Audio-Visual:

- Ads from magazines for discussion
- Tape recordings of commercials
- Picture & art drawings of products

Community:

Courthouse or newspaper
publisher for pictures of
community

ials	Continued and Additional Suggested Learning Experiences
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C 8. Cultural, economic, social, and
O
N political factors determine status
C
E of man's values and attitudes
P
T toward his environment.

Discipline Area _____ Lan
Subject _____ Eng
Problem Orientation Att

BEHAVIORAL OBJECTIVES

Cognitive: The student will be able to write a dialogue showing how man feels toward his environment.
Affective: Using interviewing and dialogue-writing techniques, the student will display awareness that man's culture and financial resources determine his attitude toward his environment.

Skills to be Learned
Discussion
Interviewing
Carry on a dialogue concerning a community problem resulting from man's value.

SUGGESTED LEARNING EXPERIENCES

- | I. Student-Centered in class activity | II. |
|---|-----|
| 1. Read a novel or short story dealing with ethnic customs or money. Discuss how ethnic customs & money influence the value of the characters. | |
| 2. Students collect & bring in pictures of various economic areas. Discuss what values brought about this particular condition. To change that condition, decide what attitudes must be changed. Also discuss if this new condition is good or bad and why. | |
| 3. Students bring to class examples of dialogue - discuss the type of person and type of values contained in these examples. | |
| 4. Choose a common ecological problem. Each student has an occupation & the class discusses how each can help to solve the problem & what values each have. | |
| 5. Some dialogue could be acted out and tape recorded. | |

economic, social, and
 ers determine status
 s and attitudes
 ironment.

Discipline Area Language Arts
 Subject English
 Problem Orientation Attitudes Grade 9

OBJECTIVES

Student
 write
 ng how
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 g inter-
 gue-
 es, the
 play
 an's culture
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 onment.

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 munity
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SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
 1. Read a novel or short story dealing with ethnic customs or money. Discuss how ethnic customs & money influence the value of the characters.
 2. Students collect & bring in pictures of various economic areas. Discuss what values brought about this particular condition. To change that condition, decide what attitudes must be changed. Also discuss if this new condition is good or bad and why.
 3. Students bring to class examples of dialogue - discuss the type of person and type of values contained in these examples.
 4. Choose a common ecological problem. Each student has an occupation & the class discusses how each can help to solve the problem & what values each have.
 5. Some dialogue could be acted out and tape recorded.

- II. Outside Resource and Community Activities
 1. Each student will interview some adult in the community concerning the ecological problem. Each student will write up the interview, using dialects, slang, idioms, as a dialogue.

Resource and Reference Materials

Continued and Additional

Publications:

One Hundred Dollor Misunderstanding
by Robert Gover.

Writing Fiction by R.V. Cassil.

Diction and Style in Writing by
Richard Altuk.

The Effective Theme by Waldow
Stegner.

Elements of Style by Wm. Strent.

Audio-Visual:

Magazine & newspaper pictures

Tape recorder

Community:

member of community

different ethnic groups

people of different financial
status

leader in industry

ce Materials

Continued and Additional Suggested Learning Experiences

Understanding

W. Cassil.

Writing by

Waldow

Wm. Strent.

ictures

ps
financial

ESEA Title III - 59-70-0135-1 Project I-C-E

9. Man has the ability to manage,
 manipulate, and change his
 environment.

Discipline Area Language
 Subject English
 Problem Orientation Attit

BEHAVIORAL OBJECTIVES

Cognitive: The student will be able to identify 5 propaganda devices in ads of products which harm his environment.
Affective: Through writing an ad to influence the public not to buy certain products, the student will show that man, at times, changes his environment at the expense of future generations.

Skills to be Learned

Identify propaganda devices
 Understand words & images of ad writing

SUGGESTED LEARNING EXP

I. Student-Centered in class activity

A. Classroom

1. Students bring in newspapers to discuss the content & make-up. Discuss why ads are important to the economy of the paper & to the needs of the people.
2. Read excerpts from The Hidden Persuaders & discuss the psychology & techniques of ad writing. Choose a few well-prepared ads. Discuss how the product is made or where it comes from; what good comes from the product & what bad results from it. Discuss the effect of words on the person reading the ad & the various propaganda devices.
3. Have each student pretend he has a certain amount of money. (\$5000) Given a list of priorities or variable items, he has to spend it all. Discuss how the wants of the class will change the environment.
4. A student has a year to do anything he wishes. What (cont.

ability to manage,

change his

Discipline Area Language Arts

Subject English

Problem Orientation Attitudes Grade 9

OBJECTIVES

Student will
write 5 propa-
ganda ads of
his own
writing.
The
certain
ad will
be
times,
comment at
the end

Identified
propaganda devices
& images

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

A. Classroom

1. Students bring in news-
papers to discuss the
content & make-up. Discuss
why ads are important to
the economy of the paper &
to the needs of the people.
2. Read excerpts from The
Hidden Persuaders & discuss
the psychology & techniques
of ad writing. Choose a
few well-prepared ads.
Discuss how the product is
made or where it comes from;
what good comes from the
product & what bad results
from it. Discuss the effect
of words on the person
reading the ad & the various
propaganda devices.
3. Have each student pretend he
has a certain amount of money.
(\$5000) Given a list of
priorities or variable items,
he has to spend it all. Discuss
how the wants of the class will
change the environment.
4. A student has a year to do
anything he wishes. What (cont.)

**II. Outside Resource and
Community Activities**

Resource and Reference Materials

Publications:

The Hidden Persuaders, Vance

Packard

Newspapers

Magazines

Audio-Visual:

Pictures

TV commercials

Using Community Resources, film
from CESA 9

Community:

Local TV editor

Continued and Additional Suggested Learning

I. (cont.)

will he do? How will it affect his fu

5. Through looking at various ads, the
become aware of what visual appeal does
product. Have each student pick a prod
through its manufacturing, is harming
He then writes an ad with proper pictu
cause the public not to buy the produc

als

Continued and Additional Suggested Learning Experiences

I. (cont.)

will he do? How will it affect his future life?

5. Through looking at various ads, the students become aware of what visual appeal does for the product. Have each student pick a product which, through its manufacturing, is harming the environment. He then writes an ad with proper pictures that might cause the public not to buy the product.

C 10. Short-term economic gains may

O

N produce long-term environmental

C

E losses.

P

T

Discipline Area La

Subject Sp

Problem Orientation

BEHAVIORAL OBJECTIVES

Cognitive: Using an ecological topic, student will organize, present & criticize a debate showing how short-term gains could produce long-term losses.
Affective: Students demonstrate an understanding of the complexities of the economic system by identifying short-term gains resulting in long-term losses in the oral discussion of the debates.

Skills to be Learned

Research
Interview
Organize
Logically present & criticize a debate concerning an ecological issue

SUGGESTED LEARNING

I. Student-Centered in class activity

A. Classroom

1. The teacher will explain the proper way to research use note cards, organize an argument and the proper way of conducting a debate.
2. Watch for debates on Topic Inquiry or something similar.
3. Have students select topics
 - a. Individual rights vs community rights
 - b. Mass transportation individual cars
 - c. Population limitation population explosion.
 - d. Forests for industry forests for recreation
4. Students research topics 4 minute presentation cases pro and con.
5. Students will get together in groups according to topics & discuss the materials discovered through research. Each group, through pooling of resources, will try to improve each member's presentation.

(cont.)

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economic gains may

environmental

Discipline Area Language Arts

Subject Speech - Debates

Natural

Problem Orientation Resources Grade 9

OBJECTIVES

1. Student
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of the
identifying
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the oral
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e
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SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
A. Classroom
1. The teacher will explain the proper way to research, use note cards, organize an argument and the proper way of conducting a debate.
 2. Watch for debates on TV - Inquiry or something similar.
 3. Have students select topic:
 - a. Individual rights vs. community rights
 - b. Mass transportation vs. individual cars
 - c. Population limitation vs. population explosion
 - d. Forests for industry vs. forests for recreation
 4. Students research topic for 4 minute presentation - cases pro and con.
 5. Students will get together in groups according to topic & discuss the materials they discovered through research. Each group, through pooling of resources, will try to improve each member's presentation.
- (cont.)

II. Outside Resource and Community Activities

Resource and Reference Materials
Publications:

National Forensic League,
Ripon College, Ripon, Wis.
Speaking by Doing, National
Textbook Co., Skokie, Ill.
Population Bomb, Paul Ehrlich
State Historical Society
Madison, Wisconsin
Discussion & Debate, National
Textbook Co., Skokie, Ill.

Continued and Additional Suggested

I. (cont.)

6. Debate groups will present all sides, & rebuttals. Optional -
7. Tape debate. Have group evaluate the teacher evaluates them.

Audio-Visual:

Community:

Materials	Continued and Additional Suggested Learning Experiences
<p>, is. nal 11. rlich y ional 11.</p>	<p>I. (cont.)</p> <ol style="list-style-type: none"> 6. Debate groups will present affirmative & negative sides, & rebuttals. Optional - questions from floor. 7. Tape debate. Have group evaluate themselves before the teacher evaluates them.

C 11. Individual acts, duplicated

O

N or compounded, produce significant

C

E environmental alterations over time.

P

T

Discipline Area Language Ar

Subject

English

Problem Orientation E. Alter

BEHAVIORAL OBJECTIVES

Cognitive: The student will be able to identify environmental alterations and to discover solutions as seen in descriptive and critical writing.

Affective: The student will illustrate that repeated acts significantly alter the environment by compiling a list of environmentally harmful effects.

Skills to be Learned

Interpretation of prose writing

Logical problem solving

Writing descriptively

SUGGESTED LEARNING EXPERI

I. Student-Centered in class activity

A. Read a short story or novel and discuss how repeated acts altered the surroundings.

B. Present slides or pictures of community run-down vs. prosperous sections. Discuss what people live in each section and why. Account for the vast difference in the surroundings. Discuss the acts that caused both environmental situations. Which is better? How can change be instituted to better the poor situation?

C. Make up a slide show, This Land is Your Land, showing how man has, through his acts, altered his environment.

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Project I-C-E

ESEA Title III - 59-70-0135-1

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Discipline Area Language Arts

Subject English

Problem Orientation E. Alterations Grade 9

TIVES SUGGESTED LEARNING EXPERIENCES

t will	I. Student-Centered in class activity	II. Outside Resource and Community Activities
ions ions e and	A. Read a short story or novel and discuss how repeated acts altered the surroundings.	A. Visit a nearby river or lake. Question students whether this is in its original state? If not, what caused the change--one act or several acts? Why did man allow this change?
t will ted ter m- ron- cts.	B. Present slides or pictures of community run-down vs. prosperous sections. Discuss what people live in each section and why. Account for the vast difference in the surroundings. Discuss the acts that caused both environmental situations. Which is better? How can change be instituted to better the poor situation?	B. Visit a poor section in town. Then compose a descriptive paragraph about it. Describe how the place should ideally look. Come up with repeated individual acts that might remedy the situation.
ose ing y	C. Make up a slide show, <u>This Land is Your Land</u> , showing how man has, through his acts, altered his environment.	

Resource and Reference Materials

Publications:

A Tree Grows in Brooklyn

Betty Smith

The Outsiders

Audio-Visual:

Slides (teacher prepared)

Magazine pictures

Student prepared slide show

Community:

Field trip to local
residential section

Continued and Additional Suggest

nce Materials

Continued and Additional Suggested Learning Experiences

klyn

ared)

de show

C 12. Private ownership must be
 O
 N regarded as a stewardship and
 C
 E should not encroach upon or violate
 P
 T the individual right of others.

Discipline Area Langu

Subject Creat

Problem Orientation V
R

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING
<p><u>Cognitive:</u> The student will be able to describe how man's manipulation of environment might violate the rights of another as demonstrated by the writing of a short story.</p> <p><u>Affective:</u> Given a short story, the student will pick out two examples of how man's use of the environment eventually infringes on the rights of others.</p>	<p>I. Student-Centered in class activity</p> <p>Discuss:</p> <p>Why certain factories are located along rivers, what good is accomplished, what problems they create for future generations.</p> <p>Why certain wilderness areas are being preserved</p> <p>How man's greediness for natural resources has contributed to erosion, pollution, and extinction of wild life.</p>
<p><u>Skills to be Learned:</u></p> <p>Be able to evaluate a short story</p> <p>Be able to write effectively showing man's manipulation of his environment</p>	<p>Read a good short story, Discuss the structure, elements and language.</p> <p>Sketch characters and plot (violation of rights).</p> <p>Write story using given plot and characters, putting own interpretation to it.</p>

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Discipline Area Language Arts

Subject Creative Writing--Short Stories

Problem Orientation Violation of Rights Grade 9

OBJECTIVES

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

Discuss:

Why certain factories are located along rivers, what good is accomplished, what problems they create for future generations.

Why certain wilderness areas are being preserved
How man's greediness for natural resources has contributed to erosion, pollution, and extinction of wild life.

Read a good short story,
Discuss the structure, elements and language.

Sketch characters and plot (violation of rights).

Write story using given plot and characters, putting own interpretation to it.

II. Outside Resource and Community Activities

Resource and Reference Materials	Continued and Additional Suggest
<p><u>Publications:</u> Professionally written stories based on this theme of violation Readings, both informative and poetic, illustrating this theme all as stimuli for ideas and the writing process</p> <p><u>Audio-Visual:</u> <u>Film</u> <u>A Thousand Clowns</u></p> <p><u>Community:</u> Local speakers, lawyers, farmers, judges who can talk anonymously of "violation" cases and stories</p>	

Materials	Continued and Additional Suggested Learning Experiences
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<p>ries olation and theme and</p>	<p>Continued and Additional Suggested Learning Experiences</p>
---	--

PROJECT I-C-E

Episode Evaluation Form
(Reproduce or duplicate as needed)

In commenting on each episode used in your class, you may wish to use the following format. Please feel free to adapt it and add more pages. Let us hear your comments - negative and positive.

I. Behavioral Objectives

A. Cognitive:

B. Affective:

II. Skills Developed

III. Suggested Learning Experiences

A. In-Class:

B. Outside & Community Activities

IV. Suggested Resource & Reference Materials
(specific suggestions & comments)

PROJECT I-C-E

Episode Evaluation Form (Reproduce or duplicate as needed)

each episode used in your class, you may wish to duplicate this suggested free to adapt it and add more pages. Let us know all your critiques and and positive.

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Project I - C - E

INSTRUCTION - CURRICULUM - ENVIRONMENTAL

ED055919

A SUPPLEMENTARY PROGRAM FOR ENVIRONMENTAL EDUCATION

DISCIPLINE AREA Language Arts GRADE 10

Produced under Title III E.S.E.A.
PROJECT I-C-E
Serving Schools in CESA's 3-8-9
1927 Main Street
Green Bay, Wisconsin 54301
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Robert
Robert
George

E INSTRUCTION - CURRICULUM - ENVIRONMENT

PROGRAM FOR ENVIRONMENTAL EDUCATION

Language Arts GRADE 10

tle III E.S.E.A.

n CESA's 3-8-9

sin 54301

Robert Warpinski, Director
Robert Kellner, Asst. Director
George Howlett, EE Specialist

PREFACE

If you wish to excite students about their environment, help is of over a hundred teachers, year long meetings, a summer workshop ecologists, this guide means realistic, developed aid for you. For which have directed teachers in writing and editing this guide.

1. This guide is supplementary in nature and the episodes are designed--to plug into existing, logical course content.
2. Each page or episode offers suggestions. Since you know your to adapt, adopt, or use. By design, the range of suggestions mentation and usage are even wider. Many episodes are self-contained others can be changed in part or developed more keenly over a possibilities allow you to explore.
3. Now we urge that you try the episodes and suggested learning plan. The reasons are simple. No guide has all the answers unless viewed in the context of your classroom situation. Thus give it a triple reading, check over the resources listed, make prime your students, and seek help. The Project personnel and knowledge page stand ready to aid your efforts. Feel free
4. The Project Resource Materials Center serves all CESA 3, 8, and private. We will send available materials pre-paid. Call for visit. Phone 432-4338.
5. Check often the Project ICE Bibliography in your school library. Center materials. Please offer suggestions, comments, or advice service may grow. Let's help each other.
6. Involve yourself with the guide by reacting to it with scratch suggestions on the episode pages or use the attached evaluation lected in late May next year and will be used in our revisions reactions and suggestions--negative and positive. Please note in the episodes may refer to specific, local community resource cases, individual school districts and teachers will have to adjust. A list of terms pertinent to the episodes is below.
7. Ecologists and other experts have simplified the issue--survival Creation's beauty and complexity--often noted as the work of a and human energy to save. A year's work by a hundred of your gesture. Without you, their work will crumble, and so might we let us live to think, feel, and act in harmony with our world.

1. Cognitive means a measurable mental skill, ability, or process
2. Affective refers to student attitudes, values, and feelings.
3. APWI means Acceptable Performance Will Include (labels a cognitive)
4. EPA - Environmental Problem Area

PREFACE

ite students about their environment, help is ready. Thanks to the efforts
achers, year long meetings, a summer workshop, university consultants and
de means realistic, developed aid for you. Please note the following ideas
teachers in writing and editing this guide.

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or use. By design, the range of suggestions is wide; your chances for exper-
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the context of your classroom situation. Thus, before trying an episode,
reading, check over the resources listed, make mental and actual notes,
ts, and seek help. The Project personnel and teachers listed on the ack-
stand ready to aid your efforts. Feel free to ask their help in pre-planning.
ce Materials Center serves all CESA 3, 8, and 9 area schools--public and
send available materials pre-paid. Call for any help, materials, or to
4338.

oject ICE Bibliography in your school library for available Resource
Please offer suggestions, comments, or advice--at any time--so that this
Let's help each other.

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episode pages or use the attached evaluation format, which will be col-
next year and will be used in our revisions. We sincerely want your
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school districts and teachers will have to adopt local or available sub-
of terms pertinent to the episodes is below.

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and complexity--often noted as the work of a genius--will take our genius
o save. A year's work by a hundred of your fellow teachers is a saving
you, their work will crumble, and so might we all--literally. Instead,
nk, feel, and act in harmony with our world.

Editorial Board

a measurable mental skill, ability, or process based on factual data.
s to student attitudes, values, and feelings.

otable Performance Will Include (labels a cognitive or mental performance.)
ntal Problem Area

ACKNOWLEDGEMENTS: The following teachers and consultants participated
of the Supplementary Environmental Education Guide

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Antho
Lilli
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Joan
Bill
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Robe
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Paul
Roy
Sist
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John
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P
T living things can use for life pro-
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Subject F

Problem Orientation

SUGGESTED LEARNING

I. Student-Centered in class activity	II
---------------------------------------	----

1. Individual work: assign a narrative paper dealing with the theme "The Week The Sun Didn't Shine," stipulating that it can be fiction or non-fiction.

2. Have the student read his paper to the class using any sound effects or props that would make his presentation more realistic.

3. Inform the students that they may enlist the help of other students to dramatize his story if he wishes.

4. Recording narratives to resemble a radio program

Narrative writing
Oral reading skills
Production skills using
the tape recorder
Interpretation skills
based on dramatizations

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Discipline Area

Language Arts

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English

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Problem Orientation

Energy Use

Grade

10

OBJECTIVES

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SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
 1. Individual work: assign a narrative paper dealing with the theme "The Week The Sun Didn't Shine," stipulating that it can be fiction or non-fiction.
 2. Have the student read his paper to the class using any sound effects or props that would make his presentation more realistic.
 3. Inform the students that they may enlist the help of other students to dramatize his story if he wishes.
 4. Recording narratives to resemble a radio program

- II. Outside Resource and Community Activities
 1. Field trip as an entire group or in small groups to observe city and country life and the effect the sun has on it.

Resource and Reference Materials
Publications:

Basic grammar & composition text
section on narrative writing.

Newspaper & magazine articles

Books dealing with darkness and
the sun - Fact or fiction.

To Build a Fire - Rondon.

The Grapes of Wrath - Steinbeck.

The Sea Around Us - Carson

Three Days to See - Keller

Continued and Additional Suggested Le

Audio-Visual:

Tape recorder

Sound effects & props to
coincide with story.

Community:

Evaluation of the farm community
and how the sun affects it.

The urban area and how the sun
affects it.

C 2. All living organisms interact among
O
N themselves and their environment,
C
E forming an intricate unit called
P
T an ecosystem.

Discipline Area _____ Language _____
Subject _____ English _____
Problem Orientation _____ Predators _____

BEHAVIORAL OBJECTIVES

Cognitive: After reading, "Thinking Like a Mountain," the student will be able to demonstrate in writing the cause and effect relationship which occurs as a result of man's attempting to exterminate predators.
Affective: The student will come to realize that man's manipulation of one element in the ecosystem will result in various effects among other elements of the system as shown through the active part the student plays in a panel discussion.

Skills to be Learned
Reading for meaning
Identifying cause and effect relationships
Expository writing
Relevant analysis

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
 1. Discuss Aldo Leopold's "Thinking Like a Mountain" from Land Country Almanac.
 - a. What was the author's attitude toward the wolf in his youth?
 - b. Why did he change this initial attitude?
 - c. What effect does the extermination of the wolf have?
 - d. What is the predator's purpose?
 1. To insure survival of the fittest
 2. To keep populations in check.
 2. Write a paragraph on one of the following:
 - a. Killing the fox will insure the pheasant.
 - b. Hawks & eagles are a nuisance to the chicken farmer, therefore, their destruction can be condoned.

- II. Outside Classroom
 1. In _____ magazine relate _____
 2. Identify _____ attitude _____ your _____
 3. Conduct _____ such as _____ in the _____ respon _____ feeling _____ and an _____ conduc _____ the to _____ possib _____ that v _____ commun _____

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Environment,

Discipline Area

Language Arts

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Subject

English

Problem Orientation

Predators

Grade 10

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. Discuss Aldo Leopold's "Thinking Like a Mountain" from Land Country Almanac.

a. What was the author's attitude toward the wolf in his youth?

b. Why did he change this initial attitude?

c. What effect does the extermination of the wolf have?

d. What is the predator's purpose?

1. To insure survival of the fittest

2. To keep populations in check.

2. Write a paragraph on one of the following:

a. Killing the fox will insure the pheasant.

b. Hawks & eagles are a nuisance to the chicken farmer, therefore, their destruction can be condoned.

II. Outside Resource and Community Activities

1. In library, locate books & magazines concerned with related problems.

2. Identify similar negative attitudes that exist within your community.

3. Conduct a survey on ideas such as 2a & b, and others, in the community. Record the responses and reasons for such feelings. Use this information and any written material to conduct a panel discussion on the topic, airing all responses possible problems or solutions that would be affective in your community.

Resource and Reference Materials

Continued and Additional Suggeste

Publications:

Sand County Almanac and Sketches
Here and There by Aldo Leopold,
Oxford University Press paperback,
1969 reprint, "Thinking Like a
Mountain" p. 129.

Never Cry Wolf by Mowatt.

Born Free

Excerpts from stories dealing with
man, nature, and animals.

Audio-V'sual:

Community:

Materials	Continued and Additional Suggested Learning Experiences
<p>sketches Leopold, paperback like a</p> <p>ing with</p>	

C 3. Environmental factors are limiting
 O
 N on the numbers of organisms living
 C
 E within their influence, thus, each,
 P
 T environment has a carrying capacity.

Discipline Area Language ArtsSubject EnglishProblem Orientation Carrying Capacity

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES
<p><u>Cognitive:</u> The students will use their artistic & imaginative skills to organize & produce a program made of projects which require the research, writing & speaking skills of the student.</p> <p><u>Affective:</u> Through the assignment, the student will evaluate his own feelings towards mankind & his environment, & interpret it for the audience by using one of the mentioned projects.</p>	<p>I. Student-Centered in class activity</p> <p>A. Class</p> <ol style="list-style-type: none"> 1. Organize a thematic presentation to be presented to the class, demonstrating the concept, "How mankind is overloading or exceeding the land's carrying capacity". 2. The class will conduct a program to be put on to another English class with each student or group of students working on a project.
<p><u>Skills to be Learned</u></p> <p>Artistic Speaking Reasoning Organizational Technical Library & research</p>	<p>Example of projects:</p> <ol style="list-style-type: none"> a. A collage representative of the concept b. Find a contemporary song or songs to illustrate the problem, use the record with the presentation c. Choose prose or poetry to read or memorize d. Create your own song or poem to present e. Find illustrative slides & correlate with appropriate music f. Present a satirical skit <p>(cont.)</p>

...ors are limiting

...organisms living

...e, thus, each,

...rying capacity.

Discipline Area Language Arts

Subject English

Problem Orientation Carrying

Capacity Grade 10

LIVES

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

A. Class

1. Organize a thematic presentation to be presented to the class, demonstrating the concept, "How mankind is overloading or exceeding the land's carrying capacity".
2. The class will conduct a program to be put on to another English class with each student or group of students working on a project.
Example of projects:
 - a. A collage representative of the concept
 - b. Find a contemporary song or songs to illustrate the problem, use the record with the presentation
 - c. Choose prose or poetry to read or memorize
 - d. Create your own song or poem to present
 - e. Find illustrative slides & correlate with appropriate music
 - f. Present a satirical skit.

(cont.)

II. Outside Resource and Community Activities

A. Outside work

1. Invite the community to view the program or present it to some local organization.

Resource and Reference Materials

Publications:

Magazines:

Life
Look
National Geographic
National Wildlife
Art

Audio-Visual:

Record player
Tape recorder

Community:

Props for skit

Continued and Additional Suggested

I. (cont.)

Examples of how man's misusing :
a. Pollution of any type
b. Population problem
c. Overcrowding streets & highways
 1. Construction of buildings
 2. Crowded residential areas

Materials	Continued and Additional Suggested Experiences
	<p>I. (cont.)</p> <p>Examples of how man's misusing the land:</p> <ul style="list-style-type: none"> a. Pollution of any type b. Population problem c. Overcrowding streets & highways <ul style="list-style-type: none"> 1. Construction of buildings (business) 2. Crowded residential areas

C 4. An adequate supply of pure
O
N water is essential for life.
C
E
P
T

Discipline Area Language

Subject English

Problem Orientation Problem

BEHAVIORAL OBJECTIVES-

Cognitive: After observation of wildlife in & about a fresh water source, the student will demonstrate by writing a creative poem, his understanding of the dependence of life upon an adequate supply of pure water.

Affective: Student will become aware of poetry as a literary art form by actually writing it themselves, developing an attitude or feelings relative to an observed situation.

Skills to be Learned

Skills of observation
Creative writing
Imagery
Research skills

SUGGESTED LEARNING

I. Student-Centered in class activity

A. Class activity

1. The class will read poetry selections dealing with nature & the importance of water plays.

2. Each student will compose a poem about some animal or bird that was seen utilizing the water source. The poem should incorporate the "concept" While recording in an interesting manner the actions of the bird or animal in & around the water source.

te supply of pure
ential for life.

Discipline Area Language Arts

Subject English

Problem Orientation Pure Water Grade 10

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

A. Class activity

1. The class will read poetry selections dealing with nature & the importance of water plays.
2. Each student will compose a poem about some animal or bird that was seen utilizing the water source. The poem should incorporate the "concept". While recording in an interesting manner the actions of the bird or animal in & around the water source.

II. Outside Resource and Community Activities

A. Community & surrounding area

1. In small groups visit a fresh water source (relatively polluted) & observe the wildlife that comes to the water source for sustenance.
2. Compile a list of those species that are observed around the water source.

B. Library

1. Research the growth of cities around the Great Lakes or other fresh water sources.

e Materials	Continued and Additional Suggested Learning Experiences
<p>Coran Poetry,</p> <p>ial</p> <p>life in</p>	

C 5. An adequate supply of clean air is
O
N essential because most organisms
C
E depend on oxygen, through respiration,
P
T to release the energy in their food.

Discipline Area
Subject
Problem Orientation

BEHAVIORAL OBJECTIVES	SUGGESTED L
<p><u>Cognitive:</u> The student will be able to write a descriptive essay about air pollution based on what he has seen, as well as be able to discuss the problem as found in his own community.</p> <p><u>Affective:</u> Through observing the air pollution problem in in his own town and writing about it, the student will show an awareness of the problem of air pollution.</p>	<p>I. Student-Centered in c activity</p> <p>A. To begin class, rap flip through 10-12 s from a film strip, g the student just eno time to jot down , i word or two, his fir impressions of each.</p> <p>B. Have the student, these impressions, w a descriptive essay what he has just see the importance it pl his life.</p>
<p><u>Skills to be Learned</u></p> <p>Descriptive writing skills</p> <p>Discussion skills</p> <p>Quick thinking</p>	

the supply of clean air is

cause most organisms

oxygen, through respiration,

the energy in their food.

Discipline Area Language Arts

Subject English

Problem Orientation Air Pollution

Grade 10

AL OBJECTIVES

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Learned
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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

A. To begin class, rapidly
flip through 10-12 slides
from a film strip, giving
the student just enough
time to jot down, in a
word or two, his first
impressions of each.

B. Have the student, using
these impressions, write
a descriptive essay on
what he has just seen and
the importance it plays in
his life.

II. Outside Resource and
Community Activities

A. The students will
then go out into their
community looking for
examples of air
pollution.

B. The teacher will then
rerun the film strip
and the class will
discuss it and the
examples that they have
found, stressing the
idea of what can be
done to overcome the
problem.

Resource and Reference Materials
Publications:

Continued and Additional:

Audio-Visual:

Environmental Pollution - Our World
in Crisis, Ward's Natural Science
Establishment; filmstrip on air
pollution.

Community:

city engineer, city clerk
township office
Dept. of Natural Resources, Green
Bay
observe examples of air pollution
in community
talk to qualified people about what
can be done to eliminate air
pollution.

Materials	Continued and Additional Suggested Learning Experiences
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Our World
i Science
on air

s, Green
ollution
about what
air

C 6. Natural resources are not equally

O distributed over the earth or over

Discipline Area

C time and greatly affect the geographic

Subject

P conditions and quality of life.

Problem Orientation

BEHAVIORAL OBJECTIVES	SUGGESTED L
<p><u>Cognitive:</u> The student will be able to compare and contrast the life styles of actual and fictional characters illustrating the importance of natural resources by writing a paper, "How the main character's life style has been molded by the area in which he lives."</p> <p><u>Affective:</u> Through observing and discussing the natural resources in the student's immediate area, they will become aware of how their lives are affected by this factor.</p>	<p>I. Student-Centered in class activity</p> <ol style="list-style-type: none"> 1. Have the class break up into groups and read the novel <u>The Old Man and The Sea</u> or <u>The Pearl</u>. Show movie, if available, of the novel. 2. Have each individual or group prepare a written paper dealing with the i "How the main character's life style has been mold by the area (natural resources) in which he liv <ol style="list-style-type: none"> a. his life style b. mental attitude toward life & duty to one's s 3. Divide class into group and carry on discussion about student's life sty and how the geographical location has influenced 5. A debate may be organized around the life sty of a rural family vs. th life style of an urban family. 6. Show slides or picture dealing with the natural resources in your area. <ol style="list-style-type: none"> a. Some should be areas
<p><u>Skills to be Learned</u></p> <p>Reading skills</p> <p>Comprehensive writing skills</p> <p>Discussion & debating skills</p> <p>Research & Interviewing skills</p>	

resources are not equally

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Discipline Area

Language Arts

Subject

English

Problem Orientation Resource Usage Grade 10

ORAL OBJECTIVES

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Interviewing skills

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
1. Have the class break up into groups and read the novel The Old Man and The Sea or The Pearl. Show movie, if available, of the novel.
 2. Have each individual or group prepare a written paper dealing with the idea "How the main character's life style has been molded by the area (natural resources) in which he lives.
 - a. his life style
 - b. mental attitude towards life & duty to one's self
 3. Divide class into groups and carry on discussion about student's life style and how the geographical location has influenced it.
 5. A debate may be organized around the life style of a rural family vs. the life style of an urban family.
 6. Show slides or pictures dealing with the natural resources in your area.
 - a. Some should be areas

(Cont.)

- II. Outside Resource and Community Activities
1. For discussion purposes, have the class research their surrounding area to find out how the natural resources from this region have influenced their lives.

Resource and Reference Materials	Continued and Addition
<u>Publications:</u> Steinbeck - <u>Flight</u> <u>The Pearl</u> Hemingway - <u>The Old Man and the Sea</u> <u>30 Basic Speech Experiences</u> , Clark Publishing. <u>Discussion & Debate</u> , National Text- book Co., Skokie, Ill.	I. (Cont.) somewhat untouch somewhat what r 1. Explain the resources & ho b. Show slides o and discuss ho different than
<u>Audio-Visual:</u> Show movie or display pictures of the novels chosen to read. slides displaying what are considered natural resources.	
<u>Community:</u> Gather information from town & country residents about their life styles	

C 8. Cultural, economic, social, and
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 N political factors determine status
 C
 E of man's values and attitudes
 P
 T toward his environment.

Discipline Area

Subject

Problem Orientation

ESEA Title III - 59-70-0135-1 Project I-C-4

BEHAVIORAL OBJECTIVES

Cognitive: The student will be able to formulate some ideas relative to the above concept and put these thoughts in organized well-structured compositions.
Affective: The student will demonstrate awareness of the factors in society that affect his values & attitudes by constructing a paper dealing with this topic.

Skills to be Learned
 Thought interpretation
 Topic sentence development
 Unifying sentences into a paragraph into overall theme
 Thought development
 Sentence structure
 Punctuation skills

SUGGESTED LEARNING

- I. Student-Centered in class activity
 1. Have students write down separate thoughts, skipping a space between each, about the aspects of the concept that affect man's values & attitudes in either city living or country living.
 2. Go back over these & place them on some order as to how you would logically want to talk about them.
 3. Write first statement on sheet of paper. Have students develop.
 4. After they have developed the first topic as far as they can tell them to glance at the 2nd statement on the other sheet & to think of a good statement to get them from this first paragraph into the next one to keep the idea flowing smoothly.
 5. Repeat with remaining statements.
 6. Use overhead projector to show papers to class, concealing names. Students will comment & make corrections.

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Discipline Area

Language Arts

Subject

English Composition

Problem Orientation

Attitudes

Grade 10

OBJECTIVES

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

1. Have students write down
separate thoughts, skipping
a space between each, about
the aspects of the concept
that affect man's values &
attitudes in either city
living or country living.

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them on some order as to how
you would logically want
to talk about them.

3. Write first statement on
sheet of paper. Have students
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the first topic as far as
they can tell them to glance
at the 2nd statement on the
other sheet & to think of a
good statement to get them
from this first paragraph
into the next one to keep
the idea flowing smoothly.

5. Repeat with remaining
statements.

6. Use overhead projector
to show papers to class,
concealing names. Students
will comment & make cor-
rections.

II. Outside Resource and
Community Activities

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Continued and Additional Suggested Learning Experiences

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C 8. Cultural, economic, social, and
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Discipline Area _____ Lang _____
 Subject _____ Spee _____
 Problem Orientation _____ Popu _____
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ESEA Title III - 59-70-C135-1 Project I-C-E

BEHAVIORAL OBJECTIVES

Cognitive: After researching the above problem, students will take part in a problem-solving group discussion as a means of better understanding the various influences that transportation, economic conditions, population growth, and increased leisure time have on land usage and centers of population density.

Affective: That through a group discussion problem-solving effort, students will become more aware of the various ways that factors such as transportation, economic conditions, population growth, and increased leisure time can have a great influence on changes in land use and population density centers.

Skills to be Learned

Research skills
 Organization skills
 Extemp. speaking skills
 Group interaction skills
 Group leadership skills
 Informative speaking
 Effective notetaking

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. Divide the class into 3 or 4 groups & present each with above concept.
2. Have students meet in groups and organize themselves by selecting a chm. and deciding how they will organize their problem-solving effort.
3. Each student then researches the problem or assigned aspects of the problem that the group has decided to break the topic into.
4. Group should meet together periodically to pool information or make progress reports on their individual research efforts.
5. Have each group present group discussion of their research in front of class. Should last about 10 min. Allow for class questions & comments.

II.

economic, social, and
 determine status
 and attitudes
 onment.

Discipline Area Language Arts
 Subject Speech
 Problem Orientation Population Density Grade 10

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
<p>researching students a problem- discussion as understand- influences on, economic ation growth, sure time e and cen- n density. through a problem- tudents will of the vari- tors such as economic con- on growth, sure time influence on use and popu- enters.</p>	<p>I. Student-Centered in class activity</p> <ol style="list-style-type: none"> 1. Divide the class into 3 or 4 groups & present each with above concept. 2. Have students meet in groups and organize themselves by selecting a chm. and deciding how they will organize their problem-solving effort. 3. Each student then researches the problem or assigned aspects of the problem that the group has decided to break the topic into. 4. Group should meet together periodically to pool information or make progress reports on their individual research efforts. 5. Have each group present group discussion of their research in front of class. Should last about 10 min. Allow for class questions & comments. 	<p>II. Outside Resource and Community Activities</p> <ol style="list-style-type: none"> 1. Bring in outside speakers to talk about the topics each group will be discussing.
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Materials	Continued and Additional Suggested Learning Experiences
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Discipline Area Language

Subject Speech

Problem Orientation Land

BEHAVIORAL OBJECTIVES

Cognitive: After presenting a simulated public hearing, incorporating a selected research problem from the orally presented news clippings of problems by each student in class, the students will use role playing as a media to demonstrate his understanding of man's individual environmental needs & wants. The students will follow-up these assignments by presenting an informative speech relating individual change or reinforcement of attitudes resulting from the study.

Affective: Through role-playing & preparing a speech dealing with man's conflicts with his environment, the students are made increasingly aware of conflicts of interest involving man's needs relative to land use.

Skills to be Learned

Role playing
 Reading aloud
 Research (cont.)

SUGGESTED LEARNING

- I. Student-Centered in class activity
 - A. Class
 1. Role-playing - Simulate a public hearing using as the basis a selected common interest problem from the local news media. One involving a wide variety of land use possibilities. e.g. The damming of a local river which could have any of the following potential effects:
 - a. Flooding of wildlife habitat
 - b. Removal of landmark trees
 - c. Electrical power availability
 - d. Creation of swimming, fishing & campsite area
 - e. Creation of watershed
 - f. Aesthetic value of landscape
 - g. Water rights above & below dam.
 2. Speech to inform reflect personal change or reinforcement of attitudes relative to situation regarding land use

ability to manage,

and change his

Discipline Area Language Arts

Subject Speech

Problem Orientation Land Use Grade 10

OBJECTIVES

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

A. Class

1. Role-playing - Simulate a public hearing using as the basis a selected common interest problem from the local news medic. One involving a wide variety of land use possibilities. e.g. The damming of a local river which could have any of the following potential effects:
 - a. Flooding of wildlife habitat
 - b. Removal of landmark trees
 - c. Electrical power availability
 - d. Creation of swimming, fishing & campsite areas
 - e. Creation of watershed
 - f. Aesthetic value of land-site
 - g. Water rights above & below dam.

2. Speech to inform reflecting personal change or reinforcement of attitudes relative to situation regarding land use.

II. Outside Resource and Community Activities

A. Community

1. Have students research, select bring to class & read aloud, a news description of an environmental conflict of interest.
2. Students interview members of the community to gain insight into their views relative to environmental problems being dealt with, & as a means of substantiating the students role-playing experience.

B. Library

1. Research books, magazines, newspapers for related problems.

Resource and Reference Materials <u>Publications:</u>	Continued and Additional Suggested <u>Skills to be Learned (cont.)</u>
<p><u>Aud:</u> Books and other library reference sources</p> <p><u>Community:</u> Local news media TV Newspaper Radio Townspeople DNR State Dept of Conservation Dept. of the Interior Council of Governments Northeast Wis. Planning Commission Wisconsin Ecological Commission</p>	<p>Informative speaking Organization Outlining Extemp speaking Interview Interpretive Business letter writing</p>

e Materials

Continued and Additional Suggested Learning Experiences

Skills to be Learned (cont.)

Informative speaking

Organization

Outlining

Extemp speaking

Interview

Interpretive

Business letter writing

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C 10. Short-term economic gains may
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Discipline Area Language
 Subject English
 Problem Orientation Land

BEHAVIORAL OBJECTIVES

Cognitive: The student will be improving his ability to organize & conduct a discussion as well as express himself rationally by writing about man's attitudes towards his environment.
Affective: The student will show his awareness of how decisions concerning economic gains may produce lasting environmental losses by finding examples of these losses & using them to prepare an essay coming the "before and after" effects.

Skills to be Learned

Discussion
 Writing
 Observation
 Analyzing

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

A. Classroom

1. Discuss in class the question, "What is it about mankind that makes him more concerned about short-term gains than long-term losses?"
2. Have each student find 3-5 examples where man's desire for wealth has produced environmental losses which will not be easily repaired.
 Examples - Junk yards, housing developments, factories, highways, gravel pits, etc.
3. Using these examples, have the students discuss in a formal essay the differences between their area today & the area before all these changes were made. How did these gains result in losses?
4. Set up a discussion with half the class supporting modernization & half against.
5. Tape the discussion & replay it for the class and (cont.)

term economic gains may

term environmental

Discipline Area Language Arts

Subject English

Problem Orientation Land Use Grade 10

OBJECTIVES

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

A. Classroom

1. Discuss in class the question, "What is it about mankind that makes him more concerned about short-term gains than long-term losses?"
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Examples - Junk yards, housing developments, factories, highways, gravel pits, etc.
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4. Set up a discussion with half the class supporting modernization & half against.
5. Tape the discussion & replay it for the class and (cont.)

II. Outside Resource and Community Activities

- A. Bring in outside speakers defending one position or the other: modernization vs. protecting conservation.**

Materials

Continued and Additional Suggested Learning Experiences

I. (cont.)

ask them to look for fallacies in reasoning.

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E environmental alterations over time.
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Discipline Area Language A
Subject English
Problem Orientation Alterat

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES
<p><u>Cognitive:</u> The student will be able to carry on a class discussion, use this information to create a well-structured short story, and deliver this to the class as an interpretive reading or production, showing how man affects his environment.</p> <p><u>Affective:</u> Evaluating man's life style and by writing his own example in the form of a short story, the student will discover that individual acts, made by either the individual or mankind as a whole, when compounded can cause important environmental changes.</p> <p><u>Skills to be Learned</u> Discussion skills Writing Skills Creativity Evaluation Skills Speaking Skills</p>	<p>I. Student-Centered in class Activity</p> <p>A. Assign any short story dealing with nature</p> <p>B. Have the class decide in what ways nature has been, or could be altered by individual acts, duplicated or compounded by either man or elements of nature.</p> <p>C. Using the blackboard, have the students create a list of acts which, if duplicated, would produce significant environmental alterations over time.</p> <p>Examples:</p> <ol style="list-style-type: none"> 1. creation of luxuries 2. use of automobiles 3. population explosion 4. industry 5. killing of animal life 6. misuse of land for farming and grazing purpose <p>D. Turn the discussion towards the students' ideas of what makes a good short story.</p> <p>E. Discuss the important elements of a short story.</p> <p>(cont.)</p>

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Discipline Area Language Arts

Subject English

Problem Orientation Alteration Grade 10

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
ent will a class s infor- well- ory, and class rea ing ing how ironment. ating d by mple in story, scover s, made idual le, when e impor- changes.	I. Student-Centered in class Activity A. Assign any short story dealing with nature B. Have the class decide in what ways nature has been, or could be altered by individual acts, duplicated or compounded by either man or elements of nature. C. Using the blackboard, have the students create a list of acts which, if duplicated, would produce significant environmental alterations over time. Examples: 1. creation of luxuries 2. use of automobiles 3. population explosion 4. industry 5. killing of animal life 6. misuse of land for farming and grazing purposes D. Turn the discussion towards the students' ideas of what makes a good short story. E. Discuss the important elements of a short story.	II. Outside Resource and Community Activities A. Observe some ideas in their own community.

(cont.)

Resource and Reference Materials	Continued and Additional :
<u>Publications:</u> Anthology or book of short stories to be used in the classroom <u>How to Write Creatively</u> J.N. Hook University of Illinois	<u>I. Student-Centered in</u> F. Have the students centered on one of G. Working as an indi necessary, have the story for the class H. Have each student on a critique form : criteria dealing wi story, and how well main idea the stude
<u>Audio-Visual</u> slides and projector still-life pictures	
<u>Community:</u> Collect their own pictures or props for productions	

Materials

Short stories
Room

Continued and Additional Suggested Learning Experiences

I. Student-Centered in class activity (cont.)

- F. Have the students create their own short story centered on one of the ideas from their list.
- G. Working as an individual, or recruiting help if necessary, have the student read or produce his story for the class.
- H. Have each student in the class evaluate one story on a critique form made up by the teacher covering criteria dealing with the elements of a short story, and how well the story is centered on the main idea the student chose from the list.

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E not encroach upon or violate

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T the individual right of others.

Discipline Area Language

Subject English

Problem Orientation Natural Resources

BEHAVIORAL OBJECTIVES

Cognitive: The student will be viewing a movie and commercials and will objectively discuss and criticize the effect the problem has on mankind, as well as create and present to the class, a better grade of commercial that protects our natural resources.

Affective: The student will show an understanding of the importance of protecting our natural resources from his own misuse, or that of others, so as to guarantee its survival for future generations, by writing a commercial that advocates protecting our natural resources.

Skills to be Learned

Observation Skills
Discussion Skills
Using Imagination
Writing Skills
Speaking and Role-playing

SUGGESTED LEARNING

- I. Student-Centered in class activity
 - A. Show the film "Neighbors" and discuss the effect nature has on man.
 - B. With the students, compile a list of things that have endured since man set foot on American soil, and that will endure beyond your own lifetime.
 - C. Discuss our responsibilities in maintaining these things.
 1. Do future generations have a right to these?
 2. Does owning land give you the right to abuse it?
 - D. Change the train of thought to the questions of commercialization and how natural resources are infringed upon by the individual consumer and "no-deposit, throw-away" society.
 - E. Have the students bring in ads and, either alone or with a partner, have(cont.

ESEA Title III - 59-70-0135-1 Project I-C-E

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Discipline Area Language Arts

Subject English

Problem Orientation Natural Resources Grade 10

LEARNING OBJECTIVES

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Role-playing

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

A. Show the film "Neighbors" and discuss the effect nature has on man.

B. With the students, compile a list of things that have endured since man set foot on American soil, and that will endure beyond your own lifetime.

C. Discuss our responsibilities in maintaining these things.

1. Do future generations have a right to these?

2. Does owning land give you the right to abuse it?

D. Change the train of thought to the questions of commercialization and how natural resources are infringed upon by the individual consumer and "no-deposit, throw-away" society.

E. Have the students bring in ads and, either alone or with a partner, have(cont.)

II. Outside Resource and Community Activities

Resource and Reference Materials	Continued and Additional
<p><u>Publications:</u></p> <p>Magazine Advertising Age showing yearly choices of "best ads"</p> <p><u>Audio-Visual:</u> Short film "Neighbors" order form An annotated checklist for 200 short films for writing classes. Illinois Association of Teachers of English. Nov. 1969. IATE Treasurer, 100 English Building Urbana, Illinois. Tape recorder Record player and records Video-tape projector</p> <p><u>Community:</u> Collecting ads Using products or business in commercial for commercial</p>	<p>Student-Centered in class</p> <p>them look for restric commercials.</p> <p>F. Discuss word choice, formed by commercials</p> <p>G. Write a commercial t rights of others to e</p> <p>H. Present it orally to</p> <p>I. Tape record or video-</p>

Materials	Continued and Additional Suggested Learning Experiences
<p>f</p> <p>Order form for 200 classes. Teachers</p> <p>ss in al</p>	<p>Student-Centered in class activity (cont.)</p> <p>them look for restrictions and composition of commercials.</p> <p>F. Discuss word choice, music, and mental picture formed by commercials.</p> <p>G. Write a commercial that does not infringe on the rights of others to enjoy natural resources.</p> <p>H. Present it orally to the class.</p> <p>I. Tape record or video-tape these.</p>

PROJECT I-C-E

Episode Evaluation Form (Reproduce or duplicate as needed)

In commenting on each episode used in your class, you may wish to use the following format. Please feel free to adapt it and add more pages. Let us know your comments - negative and positive.

I. Behavioral Objectives

A. Cognitive:

B. Affective:

II. Skills Developed

III. Suggested Learning Experiences

A. In-Class:

B. Outside & Community Activities:

IV. Suggested Resource & Reference Materials (specific suggestions & comments)

PROJECT I-C-E

Episode Evaluation Form (Reproduce or duplicate as needed)

For each episode used in your class, you may wish to duplicate this suggested form free to adapt it and add more pages. Let us know all your critiques and positive.

Objectives

d

Learning Experiences

Community Activities:

Source & Reference Materials
(Questions & comments)

Project I - C - E

INSTRUCTION - CURRICULUM - ENVIRONMENT

ED055919

A SUPPLEMENTARY PROGRAM FOR ENVIRONMENTAL EDUCATION

DISCIPLINE AREA Language Arts GRADE 11

Produced under Title III E.S.E.A.
PROJECT I-C-E
Serving Schools in CESA's 3-8-9
1927 Main Street
Green Bay, Wisconsin 54301
(414) 432-4338

Robert War
Robert Kel
George How

INSTRUCTION - CURRICULUM - ENVIRONMENT

PROGRAM FOR ENVIRONMENTAL EDUCATION

Language Arts GRADE 11

Title III E.S.E.A.

in CESA's 3-8-9

asin 54301

Robert Warpinski, Director
Robert Kellner, Asst. Director
George Howlett, EE Specialist

PREFACE

If you wish to excite students about their environment, help of over a hundred teachers, year long meetings, a summer workshop for ecologists, this guide means realistic, developed aid for you which have directed teachers in writing and editing this guide.

1. This guide is supplementary in nature and the episodes are pieces--to plug into existing, logical course content.
2. Each page or episode offers suggestions. Since you know how to adapt, adopt, or use. By design the range of suggestion, experimentation and usage are even wider. Many episodes are self-explanatory, others can be changed in part or developed more keenly over time. Possibilities allow you to explore.
3. Now we urge that you try the episodes and suggested learning plan. The reasons are simple. No guide has all the answers unless viewed in the context of your classroom situation. Give it a triple reading, check over the resources listed, prime your students, and seek help. The Project personnel knowledge page stand ready to aid your efforts. Feel free to call.
4. The Project Resource Materials Center serves all CESA 3, public or private. We will send available materials pre-paid. Call or visit. Phone 432-4338.
5. Check often the Project ICE Bibliography in your school library or Center materials. Please offer suggestions, comments, or requests. Service may grow. Let's help each other.
6. Involve yourself with the guide by reacting to it with suggestions on the episode pages or use the attached evaluation sheet collected in late May next year and will be used in our review. Your reactions and suggestions--negative and positive. Please be specific in the episodes may refer to specific, local community resources, individual school districts and teachers will have suggestions. A list of terms pertinent to the episodes is below.
7. Ecologists and other experts have simplified the issue--the Creation's beauty and complexity--often noted as the work of a year's work by a hundred of us. Without you, their work will crumble, and so must we. Let us live to think, feel, and act in harmony with our world.

1. Cognitive means a measurable mental skill, ability, or knowledge.
2. Affective refers to student attitudes, values, and feelings.
3. APWI means Acceptable Performance Will Include (labels).
4. EPA - Environmental Problem Area.

PREFACE

excite students about their environment, help is ready. Thanks to the efforts of teachers, year long meetings, a summer workshop, university consultants and guide means realistic, developed aid for you. Please note the following ideas for teachers in writing and editing this guide.

Supplementary in nature and the episodes are designed--at appropriate instances--into existing, logical course content.

Each episode offers suggestions. Since you know your students best, you decide what to use, or use. By design, the range of suggestions is wide; your chances for experimentation are even wider. Many episodes are self-contained, others open-ended, still others changed in part or developed more keenly over a few weeks. These built-in episodes allow you to explore.

As you try the episodes and suggested learning experiences but please pre-plan lessons are simple. No guide has all the answers and no curriculum will work in the context of your classroom situation. Thus, before trying an episode, do the reading, check over the resources listed, make mental and actual notes, discuss with students, and seek help. The Project personnel and teachers listed on the acknowledgment page stand ready to aid your efforts. Feel free to ask their help in pre-planning. The Resource Materials Center serves all CESA 3, 8, and 9 area schools--public and private. We will send available materials pre-paid. Call for any help, materials, or to discuss with the Project ICE Bibliography in your school library for available Resources. Please offer suggestions, comments, or advice--at any time--so that this work can be helpful to all. Let's help each other.

Work with the guide by reacting to it with scratch ideas, notes, and extended use of the episode pages or use the attached evaluation format, which will be collected May next year and will be used in our revisions. We sincerely want your suggestions--negative and positive. Please note that some resources listed may refer to specific, local community resources or conditions. In such cases, your local school districts and teachers will have to adopt local or available substitutes. A list of terms pertinent to the episodes is below.

Other experts have simplified the issue--survival--yours, mine, our students, and the world's. The complexity--often noted as the work of a genius--will take our genius to save. A year's work by a hundred of your fellow teachers is a saving grace. But you, their work will crumble, and so might we all--literally. Instead, think, feel, and act in harmony with our world.

Editorial Board

Labels are measurable mental skill, ability, or process based on factual data. Labels are not based on student attitudes, values, and feelings.

Acceptable Performance Will Include (labels a cognitive or mental performance.)

Mental Problem Area.

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CESA #3

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Laura Berken, Oconto Falls
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Nicholas Dal Santo, Pembine
Robert Dickinson, Oconto
Ann Fuhrmann, Marinette
Lillian Goddard, Coleman
William Harper, Lena
Robert Herz, St. James (L)
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Michael Kersten, Suring
Douglas Koch, Cath. Central
Donald Marsh, Bonduel
David Miskulin, Goodman
Don Olsen, Shawano
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Marion Wagner, Gillett
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George Kreiling, Marinette
Marg. McCambridge, White Lake
Virginia Pomusl, White Lake
Gailen Braun, Lena
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CESA #8

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David Bell, Neenah
Marie Below, Clintonville
William Bohne, Kimberly
Bob Church, Little Chute
Ronald Conradt, Shiocton
Lee Halberg, Appleton
Ronald Hammond, Hortonville
Jerome Hennes, Little Chute
Barbara Huth, Menasha
Darrell Johnson, Hortonville
Bernadyne King, Neenah
Harold Lindhorst, St. Martin (L)
John Little, Winneconne
Gordon Rohloff, Oshkosh
William Schaff, St. Joseph
Doris Stehr, Mt. Calvary (L)
Carolyn Shills, New London
Sister Dorothy, Xavier
Clarence Trentlage, Freedom
Mike Hawkins, Xavier
Beth Hawkins, Xavier
Ed Patschke, Menasha
Connie Peterson, St. Martin (L)
Dallas Werner, Kaukauna
Ron Schreier, Omro

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The following teachers and consultants participated in the development of the Supplementary Environmental Education Guide:

CESA #8

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Gloria Morgan, Linsmeier Private
George Pederson, Southern Door
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Ruth Windmuller, Green Bay
James Wiza, DePere
John Torgerson, Kewaunee
Benjamin Roloff, Howard-Suamico
Greg Schmitt, Cathedral
John DeWan, Green Bay
Emmajean Harmann, Sevastopol
Ray Gantenbein, Green Bay
David Bartz, Sturgeon Bay
John Hussey, Green Bay
Sister Barbara, St. Bernard

nette
W-Marquette

Ednajean Purcell, OSU
David West, Lawrence U.

Robert Cook, UWGB
Dennis Bryan, UWGB

C 1. Energy from the sun, the basic source
 O
 N of all energy, is converted through plant
 C
 E photosynthesis into a form all living
 P
 T things can use for life processes.

Discipline Area _____
 Subject _____
 Problem Orientation _____

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING

Cognitive: Students will demonstrate skill in using concrete and connotative words through imaginative writing and a personal conference with the teacher about the sun and how it affects life.
Affective: Through constructing of his own project, the student demonstrates his understanding of the sun and the effect it plays on man's life.

Skills to be Learned

Word choice
 Imaginative expression points of view.

- I. Student-Centered in class activity
 1. Students will critically discuss writing containing passages with strong and vivid images of the sun and its effect on nature.
 2. Student-made art work, pictures, slides, posters, etc. of different views of the sun.
 3. Teacher will organize a thematic presentation of their work with musical accompaniment, with the students reacting to these through imaginative writing form of their choice, poetry, narrative, essay, single effect writing.
 4. In second presentation, the student will alter his writing approach.

sun, the basic source

converted through plant

a form all living

life processes.

Discipline Area

Language Arts

Subject

English

Problem Orientation Sun Energy

Grade 11

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. Students will critically discuss writing containing passages with strong and vivid images of the sun and its effect on nature.
2. Student-made art work, pictures, slides, posters, etc. of different views of the sun.
3. Teacher will organize a thematic presentation of their work with musical accompaniment, with the students reacting to these through imaginative writing form of their choice, poetry, narrative, essay, single effect writing.
4. In second presentation, the student will alter his writing approach.

II. Outside Resource and Community Activities

1. Student will collect materials or slides of different aspects of the sun from the community.
2. Contact Art Department for pictures.
3. Contact Music Department for background music.

Resource and Reference Materials	Continued and Additional Suggested L
<p><u>Publications:</u></p> <p>Imaginative writing: Impressionistic poetry, excerpts from prose (novels, short stories), newspaper articles as selected by teacher and students.</p> <p><u>Audio-Visual:</u></p> <p>Pictures, slides, posters, art productions. Slide using shadows, light, sun Tape recorder Record player</p> <p><u>Community:</u></p> <p>Art teacher Music teacher Local library Slides from community</p>	

Materials	Continued and Additional Suggested Learning Experiences
<p>excerpts rt stories), selected s.</p> <p>rs, art</p> <p>ght, sun</p>	

C 2. All living organisms interact among
 O
 N themselves and their environment,
 C
 E forming an intricate unit called an
 P
 T ecosystem.

Discipline Area English

Subject Forms C

Problem Orientation Ec

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING
<p><u>Cognitive:</u> Students should be able to demonstrate the distinctions between descriptive & expository writing & be able to give an example of each as a reaction to a visual stimulus.</p> <p><u>Affective:</u> Students should become more sophisticated in their reading. e.g. In their grammatical usage & its bearing on their writing. They should see writers' attitudes more clearly & thus be able to measure their own attitudes more efficiently against the writer's & against other students.</p>	<p>I. Student-Centered in class activity</p> <p>A. Class</p> <ol style="list-style-type: none"> 1. Have students view similar full page pictures from some commercial magazines. Suggested examples might be comparisons. <ol style="list-style-type: none"> a. Ants working in their communities as compared to men pictured in the busy city. b. Pictures of rural or city life showing skills that are almost non-existent, compared to pictures of animals faced with extinction or that are extinct. 2. Conceal these pictures. 3. Have the student note subtle similarities & differences in a one or two sentence form. 4. Select 10 or 12 of these sentences written to be put on the board. 5. From the selected
<p><u>Skills to be Learned</u></p> <p>Defining 2 forms of writing, expository & descriptive</p> <p>Determine more effective approach in a given situation</p>	<p>(cont.)</p>

g organisms interact among

and their environment,

intricate unit called an

Discipline Area English

Subject

Forms of Writing

Problem Orientation Ecosystem Grade 11

OBJECTIVES

Students should
demonstrate the
relationship
between
expository
writing and
visual
communication.

Students should
demonstrate
the use of
writing in
the workplace
& thus
ensure their own
efficiency
as writers &
students.

Students should
learn
the forms of writing,
the descriptive
writing and the
effective
writing in a given

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
 - A. Class
 1. Have students view similar full page pictures from some commercial magazines. Suggested examples might be comparisons.
 - a. Ants working in their communities as compared to men pictured in the busy city.
 - b. Pictures of rural or city life showing skills that are almost non-existent, compared to pictures of animals faced with extinction or that are extinct.
 2. Conceal these pictures.
 3. Have the student note subtle similarities & differences in a one or two sentence form.
 4. Select 10 or 12 of these sentences written to be put on the board.
 5. From the selected

(cont.)

- II. Outside Resource and Community Activities
 - A. Library
 1. Locate examples of expository & descriptive writing associated with concept.
 2. Discuss which type of writing is most appropriate for what is being said.

e Materials	Continued and Additional Suggested Learning Experiences
<p>II, ld be used erials</p>	<p>I. (cont.)</p> <p>sentences, make distinctions between descriptive or expository sentences as they relate to the concept.</p> <p>6. Have student organize a bulletin board in hall or classroom demonstrating effectiveness of expository & descriptive writing. Use editorials, poems, etc. depicting ecological principles.</p>

C 3. Environmental factors are limiting on
 O
 N the numbers of organisms living within
 C
 E their influence, thus, each environment
 P
 T has a carrying capacity.

Discipline Area _____

Subject _____

Problem Orientation _____

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING

Cognitive: The student will be able to discuss, plan, explain and survey the application of concept #3 in two modern dramas as well as conducting a survey based on the ecological problem.

Affective: Through surveying and preparing an oral or written evaluation about the effects of living in an overcrowded area, the student will be able to understand the actions and attitudes of people in relationship to their surroundings.

Skills to be Learned

Interpretive reading skills
 Speaking skills
 Comparison of actions in relationship to an ecological problem
 Interviewing skills

- I. Student-Centered in class activity
 1. After reading one of the following plays--"The Death of a Salesman" or "West Side Story", the class will expound either verbally or in written form on the following idea.
 - a) Death of a Salesman - Willy is the way he is because he feels "stuck" between the apartments. See stage directions before Act I and dialogue in Act I.
 - b) West Side Story - Why the gangs? Why the hostility? Why the rooftop scenes? Overcrowded again.
 - c) Read excerpts from the plays dealing with problem (e.g. Biff talking about the colts and freedom...Willy talking about his apartments and lack of air.)

mental factors are limiting on
of organisms living within
ence, thus, each environment
ing capacity.

Discipline Area Language Arts
Subject English
Problem Orientation Overcrowding Grade 11

OBJECTIVES

student will
discuss, plan,
survey the
concept #3
dramas as
tating a sur-
ne ecological
ough survey-
ing an oral
luation about
living in
area, the
e able to
actions
of people
p to their

learned
reading skills
ls
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o an ecologi-
skills

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
 1. After reading one of the following plays--"The Death of a Salesman" or "West Side Story", the class will expound either verbally or in written form on the following idea.
 - a) Death of a Salesman - Willy is the way he is because he feels "stuck" between the apartments. See stage directions before Act I and dialogue in Act I.
 - b) West Side Story - Why the gangs? Why the hostility? Why the rooftop scenes? Overcrowded again.
 - c) Read excerpts from the plays dealing with problem (e.g. Biff talking about the colts and freedom...Willy talking about his apartments and lack of air.)

- II. Outside Resource and Community Activities
 1. Outside Activities - to be reported on in verbal as well as written form. (To be done as an individual or in groups of two)
 - a) Record observations made in a crowded city or store, noting the reactions of people to different situations.
 - b) Compare and contract the reactions of people in a crowded atmosphere vs. a non-crowded one. (Same setting.
 - c) Observe and record the reactions of teacher and students in an over-crowded atmosphere.
 - d) Survey people who live in apartments or tenement houses and see if they think their lives are affected by their living conditions.

Source and Reference Materials	Continued and Additional Suggested
<p><u>Publications:</u></p> <p>"East Side Story"</p> <p>"Death of a Salesman"</p> <p>Population Density Maps</p> <p>Photographs of local crowded conditions</p> <p><u>Audio-Visual:</u></p> <p>Photographs</p> <p>Maps</p> <p>Tape recorder for tape survey responses</p> <p><u>Community:</u></p> <p>Private business owners and workers</p> <p>Community members</p>	

ials	Continued and Additional Suggested Learning Experiences
<p>d</p> <p>y</p> <p>workers</p>	

C
O
N
C
E
P
T

4. An adequate supply of pure water is
essential for life. (applicable to No.5
Concept also)

Discipline Area

Subject

Problem Orientation

BEHAVIORAL OBJECTIVES

Cognitive: Through the re-
search development and pre-
sentation of contemporary
materials in the form of a
"Today" show, the students
will demonstrate their know-
ledge of the need for ade-
quate supplies of pure water
and clean air as related in
concepts 4 and 5 respectively.
Affective: A student learns
by actually preparing and
presenting a written script
for a "talk" show dealing
with the need for pure water
and clean air and how they
are passively accepted
rather than actively under-
stood.

Skills to be Learned

Research group interaction
Better understanding of mass
media - especially televis-
ion, listening and interpre-
tation.

SUGGESTED LEARNING

- I. Student-Centered in
class activity
 1. Introduce concepts 4 & 5
as theme ideas for a T.V.
show.
 2. Ask class what proced-
ures would have to be
followed to organize a pre-
sentation centering on
these themes. Ideas could
include:
 - a) use of reference mater-
ials
 - b) consulting of periodi-
cals
 - c) division of class into
groups for more direct
study
 - d) preparation of scripts
 - e) use of visual aids
 - 1) pictures (clipped
and framed)
 - 2) student prints and
slides showing acti-
vities dependent on
pure water and clean
air.
 - f) choosing of commentators
technicians and direc-
tors for the actual
show. (cont.)

ate supply of pure water is

Discipline Area English

or life. (applicable to No.5

Subject English

b)

Problem Orientation Water & Air

Grade 11

OBJECTIVES

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ment and pre-
ontemporary
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the students
ce their know-
eed for ade-
of pure water
as related in
5 respectively.
udent learns
paring and
ritten script
now dealing
for pure water
and how they
accepted
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ally televis-
g and interpre-

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

1. Introduce concepts 4 & 5 as theme ideas for a T.V. show.
2. Ask class what procedures would have to be followed to organize a presentation centering on these themes. Ideas could include:
 - a) use of reference materials
 - b) consulting of periodicals
 - c) division of class into groups for more direct study
 - d) preparation of scripts
 - e) use of visual aids
 - 1) pictures (clipped and framed)
 - 2) student prints and slides showing activities dependent on pure water and clean air.
 - f) choosing of commentators technicians and directors for the actual show. (cont.)

II. Outside Resource and Community Activities

1. Library - Find essays, articles and other materials that are pertinent to the concepts. Emphasize the necessity to edit and combine these materials to add originality to show.
2. Assign the viewing of contemporary documentary shows such as "First Tuesday" and "60 Minutes" to gather ideas and techniques for the class presentation.
 - a) Students should make notes about attention-getting techniques and elements of good reporting.
 - b) Emphasize the importance of timing and originality in these presentations.
 - c) Portions of a good speech text should be assigned for outside reading.
3. As part of the show, interviews of individuals in the community could be used. Such individuals as doctors, dentists, lawyers, factory workers (cont.)

Resource and Reference Materials

Publications:

Life
Look
Newsweek
Time
National Geographic
Newspapers
Speech Text
Media Resource Materials
"The Sea Around Us"
R. Carson
"30 Basic Speech Experiences"
Clark Publishers
"Speaking by Doing"
National Textbook Co.
Skokie, Ill.

(The included materials are generally presented with the understanding that the possibilities are limited and the breadth of this activity is very open-ended)

Audio-Visual:

News programs -T.V. & Radio

Community:

Continued and Additional Suggestions

I. (Cont.)

3. Get class ideas as to length of time required. Time could vary depending on level and resourcefulness of class from 3rd and 4th day to a couple of weeks.
4. Divide the class into groups, each with a definite subject responsibility.

ials

Continued and Additional Suggested Learning Experiences

I. (Cont.)

3. Get class ideas as to length of time required. Time could vary depending on level and resourcefulness of class from 3rd and 4th day to a couple of weeks.
4. Divide the class into groups, each with a definite subject responsibility.

II. (Cont.)

- and parents should be included to represent different opinions. Preparation of advance questions should be required as well as proper interview techniques.
4. The show should be community oriented whenever possible, but most of what is included will probably be of state and national significance.
- NOTE: The entire presentation could last from one-half to one hour as the instructor sees fit. The use of movie equipment or video-tape would enhance the experience but is not essential.

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ties
of

C 6. Natural resources are not equally
O
N distributed over the earth or over
C
E time and greatly affect the geographic
P
T conditions and quality of life.

Discipline Area _____
Subject _____
Problem Orientation Re _____

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING
<p><u>Cognitive:</u> The student will be able to write a creative description illustrating that natural resources greatly affect the quality of life.</p> <p><u>Affective:</u> Through observation and entries in journals, the student will demonstrate his awareness that the presence and absence of natural resources greatly affect the quality of life, and by describing what his community would look like with the addition of one resource.</p>	<p>I. Student-Centered in class activity</p> <p>1. Students should take their journal entry & add a given natural resource to it. Then write a descriptive theme on what he thinks this area might look like in its changed state.</p>
<p><u>Skills to be Learned</u></p> <p>Journal recording</p> <p>Creative descriptive writing</p> <p>Use of concrete writing</p>	

resources are not equally

over the earth or over

greatly affect the geographic

and quality of life.

Discipline Area

Language Arts

Subject

English

Problem Orientation Resource Usage Grade 11

L OBJECTIVES

The student
to write a
description illus-
trating natural re-
sources affect the
quality of life.
Through obser-
vations in jour-
nals, the student will
become aware of the
presence and absence
of natural resources
and how they affect
the quality of life,
and what his
world might look like
in the future.

Learned
writing
descriptive writing
writing

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity
1. Students should take
their journal entry & add
a given natural resource to
it. Then write a descriptive
entry on what he thinks this
area might look like in its
changed state.

II. Outside Resource and
Community Activities
1. Field trip to lake or river.
Discuss the effect this natu-
ral resource has on animals
and people. Why did this
have such a great effect on
them. Read Thoreau's jour-
nal of writings.
2. Individuals should observe
a given area in the community
for a number of days, then
write a journal on what
they observed.
3. Bring in pictures or slides
of areas rich in natural
resources & discuss the ef-
fect these have on the quality
of life.
4. Have a DNR representative
come to speak on what their
area will look like in 10
years.
5.

Resource and Reference Materials
Publications:

Thoreau's writings
Handbook for Environmental Action

Continued and Additional Suggest

Audio-Visual:

Film - One Day at Teton Marsh

Community:

Local river or lake
Resource person on natural
resources

sh

C 7. Factors such as facilitating transportation,
O
N economic conditions, population growth, Discipline Area
C
E and increased leisure time have a great Subject
P
T influence on changes in land use and Problem Orientati
centers of population density.

BEHAVIORAL OBJECTIVES

Cognitive: The student will be able to compare, through reading & discussing, the way life has changed & the reasons for this & display what he has learned through the creation of visual aids.
Affective: Through the collection & discussion of material dealing with changes of life in the Missiddippi area, the student should have a better understanding of life's changes.

Skills to be Learned
Comparative reading
Comparative discussion
Organization skills

SUGGESTED LEA

- I. Student-Centered in class activity
 - A. Classroom
 1. Have the class read t selections by Twain.
 2. If available, show th movie to help students understand materials.
 3. Discuss life of the area as it was in Twain's time.

uch as facilitating transportation,

itions, population growth, Discipline Area Language Arts

d leisure time have a great Subject

English

changes in land use and
population density.

Problem Orientation

Changes

of Life

Grade 11

OBJECTIVES

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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
activity

A. Classroom

1. Have the class read the selections by Twain.
2. If available, show the movie to help students understand materials.
3. Discuss life of the area as it was in Twain's time.

II. Outside Resource and
Community Activities

A. Outside classroom

1. Collect magazines or news articles dealing with life on the Mississippi as it is today.
2. Have the students present their findings to the class.
3. Discuss the changes that have been made & the reasons for them.
4. Prepare a collage, poster, bulletin board, etc. which depicts the two eras & how they differ.

Resource and Reference Materials

Continued and Additional Suggested Learning Exp.

Publications:

Life on the Mississippi, selected
essays by Twain

Magazines:

Look
Life
Time
Newsweek

Audio-Visual:

Movie:

Life on the Mississippi
Slides of the Mississippi area

Community:

Local Library
Magazine drive to find pictures
Pictures or slides gotten from
community members
Dept. of Natural Resources

Continued and Additional Suggested Learning Experiences

C 8. Cultural, economic, social, and
 O
 N political factors determine status
 C
 E of man's values and attitudes
 P
 T toward his environment.

Discipline Area _____
 Subject _____
 Problem Orientation _____

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING
<p><u>Cognitive:</u> Following the suggested learning experiences, the student will be able to state in a written paper the relationship between a man's cultural, economic, social, and political status and his values & attitudes toward the environment.</p> <p><u>Affective:</u> Through preparing a newscast, the student will come to recognize the relationship expressed in the concept.</p>	<p>I. Student-Centered in class activity</p> <p>1. Organize a ten-minute presentation simulating a newscast, focusing on stated concept.</p> <p>a. Prepare a written newscast</p> <p>b. Prepare slides and/or film illustrating how cultural, economic, social, and political factors determine status of man's values & attitudes toward his environment.</p> <p>c. Interview people of the community who represent various economic, social, cultural, and political status, taping their responses (audio & video)</p> <p>1) White collar, blue collar, etc.</p> <p>For interview, prepare an instrument to measure attitudes.</p>
<p><u>Skills to be Learned</u></p> <p>Film-making skills</p> <p>Interviewing</p> <p>Testing or measuring attitudes</p> <p>Research</p>	

omic, social, and

determine status

Discipline Area

Language Arts

nd attitudes

Subject

English

ment.

Problem Orientation Attitudes

Grade 11

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
ng the exper- will a relation- s cultural, nd poli- s values the preparing dent will he rela- in the	I. Student-Centered in class activity	II. Outside Resource and Community Activities
d ng attitudes	1. Organize a ten-minute presentation simulating a newscast, focusing on stated concept. a. Prepare a written newscast b. Prepare slides and/or film illustrating how cultural, economic, social, and political factors determine status of man's values & attitudes toward his environment. c. Interview people of the community who represent various economic, social, cultural, and political states, taping their responses (audio & video) 1) White collar, blue collar, etc. For interview, prepare an instrument to measure attitudes.	

Resource and Reference Materials
Publications:

Political Attitudes in Children by
Robert Hess.

The Cultural Basis of Our Environ-
mental Crisis by Louis Moncrief.

Continued and Additional Su

Audio-Visual:

videotape newscasts for analysis

Community:

local news people of TV, radio,
and newspaper
the community
library (materials on various
cultures & their attitudes
toward the environment).

e Materials	Continued and Additional Suggested Learning Experiences
<p>Children by</p> <p>Our Environ- is Moncrief.</p> <p>r analysis</p> <p>V, radio,</p> <p>various tudes t)</p>	

C 9. Man has the ability to mange,

O

N manipulate, and change his

C

E environment.

P

T

Discipline Area

Subject

Problem Orientat

BEHAVIORAL OBJECTIVES

Cognitive: Student at the end will be able to demonstrate his perception & understanding of concept #9 oy his own oral/visual presentation to the class.
Affective: The student will demonstrate his awareness of how he can change his own world by researching a local ecological problem, preparing a movie, & then showing this to other students or community groups.

Skills to be Learned

Demonstration
Interview
Research
Observation

SUGGESTED LE

I. Student-Centered in class activity

A. Classroom

1. Show the NBC movie, Abandoned.
2. Discuss the film tec music, narration coor & selection of subject
3. Discuss the subject presentation, viz. - ability to manipulate ment. Show movie again re-emphasize points o show them for the fir
4. Research - In areas the students live, ab cars may not be the e mental issue. Seek ou key ecology issue in through the news medi personal observation, view of local ecology Now, make a movie sho element of the local menace. Accompany it commentaries or appro music. (If movie is t expensive, maybe slid study would work.)

ESEA Title III - 59-70-0135-1 Project 100-E

the ability to manage,

and change his

Discipline Area Language Arts

Subject Film Study

Problem Orientation Land Use Grade 11

LEARNING OBJECTIVES

Student at the
able to demon-
reception &
of concept
oral/visual
to the class.
The student
ate his aware-
e can change
by researching
logical problem,
ovie, & then
to other
community

learned

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

A. Classroom

1. Show the NBC movie, The Abandoned.
2. Discuss the film technique, music, narration coordination & selection of subject matter.
3. Discuss the subject used for presentation, viz. - man's ability to manipulate environment. Show movie again to re-emphasize points or to show them for the first time.
4. Research - In areas where the students live, abandoned cars may not be the environmental issue. Seek out the key ecology issue in the area through the news media, personal observation, & interview of local ecology group. Now, make a movie showing one element of the local ecology menace. Accompany it with commentaries or appropriate music. (If movie is too expensive, maybe slide case study would work.)

II. Outside Resource and Community Activities

A. Community

1. Show two or three of the best movies submitted by the class at the next PTA meeting or at an all school assembly to spur these groups to some ecological action.

Resource and Reference Materials

Continued and Additional Suggeste

Publications:

Speaking By Doing, National
Textbook Co.-Skokie, Ill.

Audio-Visual:

The Abandoned

Alone in the Midst of the Land

from ABC-TV Educational Enter-
prises, Room 1040, #0079C1,
\$10.00, 30 Rockefeller Plaza,
New York, N.Y. 10020

A fine collection of movie
write-ups all dealing with ecology

Community:

Materials	Continued and Additional Suggested Learning Experiences
<p>nal l.</p> <p>Land Enter- Cl, laza,</p> <p>e th ecology</p>	

C 10. Short-term economic gains may
 O
 N produce long-term environmental
 C
 E losses.
 P
 T

Discipline Area Eng

Subject Eng

Problem Orientation

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING

Cognitive: Each student will be able to make a written statement on the effect of the manipulation of the land by man through the reading of Grapes of Wrath.

Affective: By discussing the novel, Grapes of Wrath, and by collecting contemporary articles concerning man's conflict with the land, the student presents an understanding of what happens when the land does give out.

Skills to be Learned

Relating to community attitudes on the land

Writing reactions to human dilemma

Analyzing good literature for ecological references

I. Student-Centered in class activity

1. Read Grapes of Wrath.
2. Answer discussion questions concerning ecological significance.
3. React in writing to photos of depravation and poverty.

Short-term economic gains may

Long-term environmental

Discipline Area English

Subject English

Problem Orientation Land Usage Grade 11

ORAL OBJECTIVES

Each student
is to make a
statement on the
manipulation of
land by man
reading of
Grapes of Wrath.
By discussing
Grapes of Wrath
and collecting
primary articles
on man's conflict
with the land,
the students
will learn
of what
the land
is.

Learned
community
in the land
actions to
maintain
good liter-
ecological

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
1. Read Grapes of Wrath.
 2. Answer discussion questions concerning ecological significance.
 3. React in writing to photos of depravation and poverty.

- II. Outside Resource and Community Activities
1. Find contemporary articles and photos concerning man's conflict or dependence on the land.
 2. Report on the Oklahoma Dust Bowl.
 3. Research what is being done in the community to insure the lands continued productivity.

Resource and Reference Materials
Publications:

Grapes of Wrath, John Steinbeck
Ecology, a teaching unit from
Campus book club including
Walden, Born Free and The Bear
Scholastic Book Services,
50 West 44th Street, New York,
New York 10036

Audio-Visual:

Community:

Continued and Additional Suggeste

e Materials

Continued and Additional Suggested Learning Experiences

Steinbeck
it from
uding
The Bear
es,
New York,

C 11. Individual acts, duplicated—
 O
 N or compounded, produce significant
 C
 E environmental alterations over time.
 P
 T

Discipline Area Language

Subject English

Problem Orientation

BEHAVIORAL OBJECTIVES

Cognitive: Through the research of contemporary writing, the student will learn the importance of recycling and demonstrate this understanding by participating in an actual glass drive.

Affective: The student, through actual participation in a civic problem, develops an understanding of the important part he can play in altering his environment.

Skills to be Learned

Research group discussion
 Group participation
 Active involvement in project
 Assessment of an activity

SUGGESTED LEARNING

- I. Student-Centered in class activity
 - A. Introduce the essentials of group discussion or planning
 - B. Introduce an environmental cause (glass disposal, paper disposal)
 - C. Make classroom committees responsible for:
 1. Writing handout sheets
 2. Writing newspaper articles
 - D. Check sources for ideas which could be used to increase community impact

Project I-C-E

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